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Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Steven Spencer

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2016

The Relationship Between School Type and Mental Health of Lesbian, Gay, Bisexual,
Transgender, and Questioning Young Adults

by

Steve Spencer

MA, Chapman University, 2009

BA, University of California, Santa Barbara, 1993

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

August 2016

Abstract

Gay-straight alliance (GSA) clubs may positively affect mental health for lesbian, gay, bisexual, transgender, and questioning (LGBT) students, but little research has studied schools that primarily enroll LGBT students. Guided by neofunctional and sexual stigma theory, the purpose of this study was to determine if graduates of LGBT high schools have better mental health than LGBT and heterosexual graduates of mainstream high schools. A snow ball sample, of 183 graduates of high schools in the United States and 95 graduates from high schools in other countries, 80% who identified as LGBT, completed an online survey consisting of 5 short mental health assessments, measuring anxiety, depression, self-esteem, internalized homophobia, and life satisfaction. Including demographic variables as covariates, ANCOVA was used to test for significant difference in the mental health of former students who have attended high schools with GSAs (GSA+) compared with graduates of high schools without GSAs (GSA-). Research results found that U.S. graduates of GSA+ high schools had significantly higher self-esteem ($p = .034$) and life satisfaction ($p = .026$) than U.S. graduates of GSA- high schools. Graduates of non U.S. GSA+ high schools had significantly lower levels of depression ($p = .016$) than graduates of U.S. GSA- high schools. Students who identified as gender conforming had significantly higher levels of self-esteem ($p = .004$) and significantly lower levels of depression ($p = .000$) than students identifying as nongender conforming. The social change implications of these findings include urging school administrations across the country to support GSAs as they may improve the mental health of students who identify as LGBT or nongender conforming.

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Dedication

Writing a dissertation is a task few will start and fewer will complete. For me, the hardest part of the process was finding the courage to ask the late Dr. Thomas Trocchio, Ph.D. to chair my committee. I knew Dr. Trocchio to be a strict, no-nonsense professor who required his students to meet exacting standards. To be honest, I wasn't sure I would measure up. However, one day I asked, and he accepted.

Over the next two years Dr. Trocchio guided me through the hardest part of the dissertation, the literature review. Sadly, Dr. Trocchio passed away before I was able to accomplish more. While my dissertation took much longer to complete than I had anticipated, I'd like to think that he'd be proud of my work. With that, I dedicate this study to Dr. Thomas Trocchio.

Acknowledgements

First and foremost, I'd like to thank my chair, Dr. Nina Nabors. After Dr. Trocchio's passing, Dr. Nabors not only agreed to become my committee chair but also quickly recruited Dr. Chet Lesniak to serve on my committee. Completing my dissertation has not been easy. Yet, Dr. Nabors has been there every step of the way.

I'd also like to thank Dr. Lesniak for his invaluable assistance. Dr. Lesniak agreed to join my committee on very short notice and, by incorporating his comments and suggestions, my dissertation became a stronger, more scholarly document. Furthermore, very few revisions were required when it reached the University Research Reviewer.

Finally, I'd like to thank former student, Jose Castro-Sanchez. After more than a month of collecting data I had fewer than 30 respondents. Jose suggested Reddit, a website popular with young adults his age. Jose posted my study, and within a month's time I had well over 250 participants. Without his help, my study might not have had enough respondents to reach statistical significance.

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Chapter 1: Introduction to the Study

Introduction

High school is a challenging time for many youth (Murphy, 2012). Within the period of 4 years high school students are expected to transition from being adolescents to being young adults (Murphy, 2012). Older high school students often can drive and many have part-time jobs. Many adolescents begin dating in high school; some teenage couples even marry and start a family shortly after graduation. All of these newfound freedoms and responsibilities can lead some teenagers to experience some form of mood disorder, namely anxiety, and depression (Tezvaran, Akan, & Zahmacioglu, 2012). However, some students fare worse than others.

Lesbian, gay, bisexual, transgender, and questioning (LGBT) students often experience higher levels of psychological stress and lower self-esteem than heterosexual students (Mayberry, 2013). LGBT students are at an increased risk of being bullied by classmates, often have lower levels of academic achievement, and are more likely to engage in substance abuse than heterosexual peers (Mayberry, 2013).

Gay-straight alliances (GSAs) provide safe spaces and support for LGBT high school students (Kassen & Lapointe, 2013). In 1988, the first gay-straight alliance (GSA) began at a school in Los Angeles, California (Murphy, 2012). Today, over 4,000 U.S. schools have a GSA on their campus (Walls, Wisneski, & Kane, 2013a). However, with over 24,500 U.S. public schools, the vast majority of the nation's LGBT students still attend a school without a GSA on campus (National Center for Education Statistics, 2013).

Researchers have found correlations between attending schools with GSAs (GSA+) and various positive outcomes (Heck, Flentje, & Cochran, 2013; Lee, 2001). For example, students attending GSA+ schools often experience significantly less bullying from peers (GLSEN, 2012), report significantly lower levels of depression (Heck et al., 2013), and feel more connected to their school (GLSEN, 2012) than peers attending a high school without a GSA on campus (GSA-).

However, most GSA+ schools often do not offer the array of benefits and services that predominately non heterosexual high school (LGBT high school) can and do provide (Pardini, 2013). LGBT high schools are high schools that enroll mostly LGBT students, although heterosexual students are also welcome. There are only a handful of LGBT high schools in the United States, often located in large, urban areas. If a positive relationship between attending LGBT high schools and greater levels of mental health can be established, other school districts throughout the country may consider opening a LGBT high school for LGBT students in their community. This chapter includes a description of variables and how those variables will be measured. The independent variable was school type: LGBT high school, GSA+, or GSA-. Dependent variables were evaluated using established psychometric instruments, such as the Spielberger State Trait Anxiety Inventory (STAI), the Center for Epidemiologic Studies Depression Scale Revised (CESD-R), the Revised Internalized Homophobia Scale (IHP-R), the Rosenberg Self-Esteem Scale (RSE), and the Satisfaction with Life Scale (SWLS).

Covariate variables included sexual orientation, level of gender-conformity, birth sex, gender identity, and race. Variables such as race, birth sex, and gender identity were

self-report items. Some students might have had difficulty identifying level of gender conformity and sexual orientation. For instance, students from different cultural backgrounds may perceive their behavior to be gender-typical, whereas their peers may view their behavior as gender-atypical (Patterson, 2012b). Patterson developed the Gender Identity Scale (GIS) to test whether children's (aged 8-12) self-perceived gender typicality was correlated with same-gender interests (Patterson, 2012a). The first 10 questions of the GIS can assist students in determining if they are mostly gender conforming, mostly gender nonconforming, or neither (Patterson, 2012a).

Based on interviews with students at Indiana University, Kinsey proposed a sexual orientation scale ranging from 0 (exclusively heterosexual) to 6 (exclusively homosexual), as well as X for those who reported being attracted to neither sex (Drucker, 2012). The Klein Sexual Orientation Grid (KSOG) is a seven by three grid developed by Fritz Klein (Weinrich & Klein, 2002). The grid consists of seven questions that are answered in a Kinsey scale format (0-6) for the present, the past, and the ideal (Weinrich & Klein, 2002). For example, respondents identify their sexual attraction in the present, past, and ideal marking each column with a number from 0-6 (Weinrich & Klein, 2002). An online version of the KSOG can provide respondents with a Kinsey scale number that identifies them as mostly heterosexual, completely homosexual, or somewhere in between (Southampton City Council, 2015).

The theoretical framework for this study consisted of two theories by Herek (1986, 1997), both of which address prejudice directed toward LGBT people. The neofunctional theory posits reasons or motivations behind this prejudice, while the sexual

stigma theory lists ways in which both heterosexual and LGBT students are harmed by prejudice. Together, these theories explain how and why LGBT students are bullied by perceived to be heterosexual peers.

Background

Youth who are bullied in high school often develop a wide range of mood and anxiety disorders, suffer from lowered self-esteem, and often do poorly in school, if they do not drop out of school altogether (Smokowski & Kopasz, 2005) When compared with heterosexual peers, LGBT students are not only at a greater risk of being bullied (Sohaili, 2011), but they often have fewer people to turn to for help and support (GLSEN, 2012).

Some LGBT students are relatively gender conforming, meaning that they act, dress, and appear to show an interest in subjects and activities similar to other students of their biological sex. These students are often presumed by others to be heterosexual. However, a small minority of LGBT students either identity as members of the opposite sex (transgender) or behave in a manner inconsistent with their biological sex (nongender conforming). These students face bullying and peer harassment, and have more severe mental health problems than LGBT students who are more gender conforming (G Rieger & Savin-Williams, 2012).

In an effort to curb bullying and avoid the legal consequences of bullying, most schools have adopted strict antibullying policies (Kalman, 2013). Many school districts have purchased one or more antibullying programs, most of which require substantial amounts of class time to be successfully implemented (Kalman, 2013). These programs can often be expensive (Kalman, 2013). However, the program touted to be the most

effective at reducing bullying has only been shown to reduce bullying by 12% (Kalman, 2013). Some forms of bullying, such as exclusion and social bullying, are difficult if not impossible to prevent (Peeters, Cillessen, & Scholte, 2010). Bullying continues in America's schools and LGBT students continue to suffer.

In the 1980s, Herek formulated two theories related to prejudice directed against LGBT people. Herek's theories are used to explain the motivations and consequences of prejudice against LGBT persons. The neofunctional theory explains motivations for harboring or expressing prejudice (Herek, 1986). For example, a person who desires to be accepted by a certain school clique might bully a LGBT student in the hopes that members of that clique will then look at him or her more favorably (Herek, 1986). A student who believes that he might be LGBT might bully another suspected or known LGBT student (Herek, 1986). By directing other students' attention onto the other student, the bully not only pushes his own troubling LGBT feelings aside, but also directs any suspicion of LGBT status away from him or her and onto others (Herek, 1986).

Herek's sexual stigma theory was modeled after the minority stress theory (MST) formulated by Brooks in 1981 (Fingerhut, Peplau, & Gable, 2010). Like the MST, the sexual stigma theory identifies ways in which prejudice harms minorities (Herek, 2007). However, Herek's theory goes one step further in identifying ways in which the bully, or perpetrator of prejudice, is harmed (Herek, Gillis, & Cogan, 2015a).

LGBT students attending a high school with a GSA on campus experience less peer bullying and score better on various mental health inventories (GLSEN, 2012; Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Toomey, Ryan, Diaz, & Russell,

2011). Students who are more strongly gay-identified have been shown to have better mental health (Fingerhut et al., 2010). While it may be reasonable to assume that LGBT students attending a LGBT high school would perform better on mental health inventories than LGBT students attending mainstream high schools, this relationship has never been established. I attempted to address this important gap in the literature review; however, no participants who had graduated from a LGBT high school chose to participate. If it had been established that students attending a LGBT high school had higher levels of total mental health when matched with similar students attending other schools, more school districts may have considered opening such a school in their district.

Problem Statement

Previous researchers have indicated that there may be a positive association between having a GSA on a high school campus and better academic and social outcomes for LGBT students (Heck et al., 2013; GLSEN, 2012). However, as of March 2015, no studies involving a LGBT high school were located in any of the following databases: PsycINFO, PsycARTICLES, MEDLINE, and CINAHL, Academic Search Complete, and LGBT Life with Full Text.

LGBT high schools are thought to provide LGBT students with a school environment in which LGBT students are respected and welcomed, not just tolerated. Although there are currently over 4,000 GSA chapters in the United States, there are very few LGBT high schools in the United States. As of now, there are only two brick-and-mortar public LGBT high schools in the United States (Kirchick, 2003; Pardini, 2013).

The Gay, Lesbian, Straight Education Network (GLSEN, 2012) identified several factors that have been demonstrated to benefit LGBT students. For instance, having a GSA on campus has been shown in some instances to reduce bullying and provide LGBT students with a greater sense of safety and school connectedness (GLSEN, 2012). LGBT students attending a GSA+ school are likely to perform better academically and score better on various measures of mental health (Poteat et al., 2013).

GSAs differ markedly in function and ability to meet the needs of its members. Some GSAs are nothing more than a supportive counselor, while other GSAs seek to encourage LGBT youth to fight against heteronormative school processes (Currie, Mayberry, & Chenneville, 2012). Other factors may also determine how effective the individual GSA chapter can be. For instance, a school located in a community that embraces gay rights is more likely to be supportive of a GSA chapter than a school located in a less tolerant environment (Watson, Varjas, Meyers, & Graybill, 2010). There are also personality differences amongst GSA chapter advisors; some of these personality differences (e.g. extroverted versus introverted) make some advisors more effective in advocating for LGBT student rights than other GSA advisors (Watson et al., 2010).

It is unclear how much each factor influences the academic performance or mental health of LGBT youth. It is difficult to determine how effective a particular GSA will be in reducing anxiety, depression, internalized homophobia, or improving an individual's self-esteem. The difference in the type and purpose of GSAs, combined with differences in school climate, also makes it unlikely that studies involving a large number of GSAs will accurately describe or portray any one particular GSA+ school.

There are many potential advantages to studying LGBT high schools. First, LGBT high schools have a student body comprised mostly of LGBT students. Students attending a LGBT high school are bullied substantially less than they would be if they chose to attend a mainstream high school (Pardini, 2013). It is also likely that, as a group, teachers and support personnel choosing to work at a LGBT high school would be more supportive of LGBT students than faculty and staff at mainstream high schools. Curricula at LGBT high schools address issues important to LGBT students (Pardini, 2013); this is likely not the case in most mainstream high schools (GLSEN, 2012). A study of LGBT high schools could help demonstrate that under the right conditions LGBT students would not only have fewer mental health problems but also greater self-esteem.

Study Purpose

The purpose of this quantitative study was to determine if a relationship exists between the type of high school attended and the mental health of LGBT students attending those schools. It is possible that LGBT students choosing to attend LGBT high schools may be, as a group, different from LGBT students attending mainstream (GSA+ and GSA-) high schools. For instance, LGBT students attending LGBT high schools may be less gender conforming than LGBT students attending mainstream (GSA+ and GSA-) high schools. Since both LGBT high schools in this study are located in large, metropolitan cities, these high schools may have a larger racial minority enrollment than high schools in more rural areas (Pardini, 2013). Differences in sexual orientation, gender identity, and numbers of females versus number of males may also exist.

Race (Latzman et al., 2011), sexual orientation (Heck et al., 2013), gender identity (Haas et al., 2011), level of gender conformity (Toomey, Ryan, Diaz, Card, & Russell, 2013), and biological sex (LaTorre, Yu, Fortin, & Marrache, 1983) may moderate levels of anxiety and depression in LGBT persons. For this reason, these covariate variables will be used to identify similar students attending each of the three different school types. I sought to determine if recent graduates of LGBT high schools have better mental health than similar recent LGBT graduates of mainstream high schools.

Research Questions and Hypotheses

RQ1: When controlling for sex, race, sexual orientation, gender identification, and level of gender conformity, do recent graduates of an LGBT high school have lower levels of anxiety (as measured by the STAI) and lower levels of depression (as measured by CESD-R) than recent LGBT graduates of GSA+ and GSA- high schools?

H_01 : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, recent graduates of LGBT high schools will be no more anxious or depressed than recent LGBT graduates of GSA+ or GSA- high schools.

H_{a1} : When matched for sex, race, sexual orientation, gender identity, and level of gender-conformity, recent graduates of LGBT high schools will be less anxious and less depressed than recent LGBT graduates of GSA+ high schools, who in turn will be less anxious and depression than recent LGBT graduates of GSA- high schools.

RQ2: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school

have higher levels of self-esteem as measured by the Rosenberg Self-Esteem Scale than recent LGBT graduates of mainstream high schools?

H_{02} : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the respective recalled levels of self-esteem of recent graduates of LGBT high schools compared with LGBT students attending mainstream high schools.

H_{a2} : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be a significant difference in the respectively recalled levels of self-esteem of recent graduates of LGBT high schools compared with LGBT students attending mainstream high schools.

RQ3: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school have lower levels of internalized homophobia as measured by the Revised Internalized Homophobia Scale than recent LGBT graduates of GSA+ and GSA- high schools?

H_{03} : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the levels of internalized homophobia of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ and GSA- high schools.

H_{a3} : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be significantly lower levels of internalized homophobia of recent graduates of LGBT high schools compared with recent LGBT graduates of

GSA+ high schools. Recent LGBT graduates of GSA+ high schools will have lower levels of internalized homophobia than recent graduates of GSA- high schools.

RQ4: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school have higher levels of life satisfaction as measured by the Satisfaction With Life Scale than recent LGBT graduates of GSA+ and GSA- high schools?

H_04 : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the levels of life satisfaction of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ or GSA- high schools.

H_a4 : When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be a significant positive difference in the levels of life satisfaction of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ high schools. Recent LGBT graduates of GSA+ high schools will have significantly higher levels of life satisfaction than recent LGBT graduates of GSA- high schools.

Theoretical Foundation

Two theories were used to frame this study. The neofunctional theory, although primarily used by Herek to describe motivations behind the bullying of LGBT persons, explains two other issues associated with this study. First, the neofunctional theory helps explain why antibullying programs are often not effective against bullying, namely because those programs do not provide the rewards that the bullies are seeking (e.g. peer

group status, access to desirable opposite-sex classmates; Herek, 1986). Second, the neofunctional theory would suggest that people who stand up to bullies or speak out against bullying are obtaining some of the same rewards as those who bully or speak out against homosexuality (G. M. Herek, 1986).

The neofunctional theory explains the motivations and benefits of aggression (bullying, or refusing to accept the victim role in bullying). The sexual stigma theory, explained next, describes how bullying impacts not only the victims (LGBT persons, or persons suspected of being LGBT), but also the aggressors (Herek, 2007)

The sexual stigma theory is comprised of three parts. The first part, enacted stigma, details the myriad of ways LGBT people are victimized by bullies (Herek et al., 2015a). Examples of enacted stigma include discrimination (e.g. housing and employment), hate crimes, and ostracism (Herek, 2007).

A second part of sexual stigma describes ways in which both LGBT and heterosexual people modify their behavior in order to appear heterosexual (Herek et al., 2015a). Examples include avoiding gender non conforming behaviors, limiting physical contact with same-sex friends, and stating (verbally or behaviorally) that one is heterosexual. A recent study found that adolescents with higher levels of sexual prejudice reported poorer social interactions with their peers (Poteat, Mereish, & Birkett, 2015).

The third part involves the acceptance by both LGBT and heterosexual people that heteronormative behavior and heterosexuality are superior to other forms of behavior and sexual orientations (Herek et al., 2015a). Examples include a heterosexual bully who feels justified in physically attacking other students because they are perceived to be

LGBT, or LGBT students accepting physical and verbal harassment as something to be expected because they are LGBT (Herek et al., 2015a).

Neofunctional Theory

The neofunctional theory proposed by Herek gives six possible motivations for bullying (Herek, 1986). A student might be motivated to bullying a LGBT student as a way to increase his or her self-esteem or reduce his or her anxiety (Herek, 1986). Others might bully to fit in with other more popular or desirable students (G. M. Herek, 1986). Some bullies might feel that they might be LGBT themselves, and use the bullying of LGBT students as a defense mechanism (G. M. Herek, 1986).

Herek referred to the motivations above as expressive motivations (Herek, 1986). However, some students may bully LGBT students not because they obtain a benefit from expressing a point of view, but rather because they actually harbor negative feelings for LGBT people (Herek, 1986). Some people have had some nominal negative contact with members of the LGBT community and, based on that limited exposure, assume other members of the LGBT community must be similar (G. M. Herek, 1986). At other times, a person may have had a positive experience with a LGBT person, but assume that that person was only an exception to his negative belief structure (G. M. Herek, 1986). Others might only have heard rumors about LGBT people, and assume that any future experience would mirror the rumors he or she has heard (Herek, 1986).

Herek's (1986) neofunctional theory demonstrates the need for more LGBT high schools within the United States. Heterosexual bullies gain status and recognition by bullying physically weaker or less popular students (Sijtsema, Veenstra, Lindenberg, &

Salmivalli, 2009a). Unlike other minorities or disadvantaged groups, LGBT students are viewed by some as immoral, disgusting, and deserving of whatever heterosexual students dish out (Eldridge & Johnson, 2011).

Sexual Stigma Theory

Herek et al., (2007) posited that there are three ways in which LGBT people are made to feel inferior by the heterosexual majority. Enacted stigma refers to actual name calling, physical violence, and the like (Herek et al., 2015). In order to avoid being labeled LGBT, and therefore to avoid experiencing elements of enacted stigma, a LGBT person may try to appear heterosexual (Herek et al., 2015a). This is referred to as felt stigma (Herek et al., 2015). Internalized stigma (or internalized homophobia) refers to the belief that one is really inferior to his or her peers because of his or her LGBT status (Herek et al., 2015a). Heterosexuals who believe that they are superior to LGBTs because of their heterosexual status can be said to be sexually prejudiced (Herek et al., 2015).

Herek's sexual stigma theory helps explain why, unlike other minority groups, many LGBT high school students are alone in their struggle to survive 4 years of high school. In order to avoid being stigmatized, many LGBT students choose to present as heterosexual (Herek et al., 2015). However, while LGBT students who are presumed heterosexual are not as likely to be bullied, they will often suffer from internalized homophobia and lowered self-esteem (Herek et al., 2015).

Fear of stigmatization prevents many LGBT students from enjoying high school (Kosciw, Bartkiewicz, & Greytak, 2012). Sexual stigma hurts heterosexuals as well (Herek et al., 2015). Many heterosexual students will not engage in activities that cross

gender boundaries for fear of being labeled LGBT (Herek, 2007). Since sexual orientation is not observable, sexual stigma may be more about gender conformity than about sexual orientation (Herek, 2007).

Nature of the Study

This study consisted of a survey made available to young adults (18-23) who graduated from a U.S. high school within the last 5 years. The study survey was available via a Facebook page describing the study. I sought to determine if various mental health measures are correlated with the type of school the participants attended in high school. There are at least two advantages to conducting an online survey.

One advantage to conducting an online survey is that respondents can answer questions anonymously or confidentially. Respondents are more likely to disclose potentially embarrassing information if they can do so anonymously or confidentially (van de Looij-Jansen, Goldschmeding, & Jan de Wilde, 2006).

Another advantage of an online survey is that it is likely to reach many more people. Recipients of the survey were asked to forward the survey to any recent LGBT high school graduates personally known to them. Using this snowball effect, it was anticipated that more than enough responses will be collected to achieve statistical significance.

Variables: Dependent

Anxiety. For the purposes of this study, anxiety is defined as “a mood state characterized by apprehension and somatic symptoms of tension in which an individual

anticipates impending danger, catastrophe, or misfortune” (VanderBos, 2007, p. 63). This variable will be measured using the Spielberger’s State Trait Anxiety Inventory.

Depression. For the purposes of this study, depression is defined as “dysphoria that can vary in severity from a fluctuation in normal mood to an extreme feeling of sadness, pessimism, and despondency” (VanderBos, 2007, p.269). This variable will be measured using the Center for Epidemiologic Studies Depression Scale--Revised (CESD-R).

Internalized Homophobia. For the purposes of this study, internalized homophobia is defined as “a sexual minority individual’s personal acceptance of sexual stigma as a part of his or her own value system” (Herek, Gillis, & Cogan, 2009, p. 33). Internalized homophobia will be measured using the 5-item Revised Internalized Homophobia Scale created by Gregory Herek.

Life Satisfaction. For the purposes of this study, life satisfaction is defined as the extent to which a person’s life matches with his or her ideal life (Diener, 2006). Life Satisfaction will be measured with Diener’s 5-item Satisfaction With Life Scale (SWLS).

Self-Esteem. For the purposes of this study, self-esteem is defined as “the degree to which the qualities and characteristics contained in one’s self-concept are perceived to be positive” (VanderBos, 2007, p. 830). The Rosenberg Self-Esteem Scale will be used to measure study participants’ level of self-esteem.

Variables: Independent

School Type. GSA+ refers to public high schools that have an active GSA chapter on their campus. GSA- refers to public high schools that do not have an active

GSA chapter on their campus. LGBT high schools refers to public high schools that enroll mostly LGBT students.

Variables: Covariate

Birth Sex. For the purpose of this study, birth sex will be limited to male or female. While there are other categories, for instance, intersex, this study will be limited to those who report being born either male or female.

Gender identity. Gender identity refers to the sex that a person most identifies (Patterson, 2012). A person can identify as a male, a female, or a mixture of both. For the purpose of this study, a biological male that identifies as a biological female will be referred to as Male-to-Female (MTF), and a biological female that identifies as a male will be identified as Female-to-Male (FTM). A person who does not identify with any of the above will be classified as gender queer/other gender identity.

Sexual Orientation. Sexual orientation refers to the sex(es) a person finds himself or herself attracted (Weinrich & Klein, 2002). For the purpose of this study, a Kinsey scale format will be used. Although Kinsey himself never created a scale (he rated people by interview), several links to scales are available via the Kinsey Institute website. The link to the Klein Sexual Orientation Grid (KSOG) can be reached at <http://www.youngsouthampton.org/children-and-young-people/advice/relationships/sexuality/klein-sexual-orientation-grid-quiz.aspx>).

It is not necessary that study participants complete this assessment; however, if a participant is unsure how to classify his or her sexual orientation, this assessment will be helpful. If the participant chooses to complete the assessment, the program will assign the

user a value from 0-6, usually in the form of a decimal. A value of 0 indicates completely heterosexual, while a value of 6 indicates completely homosexual. A value of 3 indicates the user is equally heterosexual and homosexual

Gender Expression/Conformity. Gender expression refers to what degree a person's behaviors match or do not match his or her birth sex prototypical behaviors (Patterson, 2012). Unlike sexual orientation, gender expression is often visible to others. It is expected that persons identifying as MTF, FTM, or gender queer will also be gender nonconforming to some degree. Gay men in general are less gender conforming than bisexual men, who in turn are less gender conforming than heterosexual men (Skidmore, Linsenmeier, & Bailey, 2006).

Participants will be asked to state whether they are mostly gender conforming, mostly gender nonconforming, or equally conforming and nonconforming. If a participant is unsure, they may reference the Gender Identity Scale (Patterson, 2012), consisting of 10 questions related to gender conformity. For the purposes of this study, participants who endorse gender conforming responses to seven or more questions will be considered gender conforming; if three or fewer gender conforming responses are endorsed, the participant would be considered gender non conforming. Four, five, or six gender conforming responses would indicate that a person is neither gender conforming nor gender nonconforming.

Race/Ethnic Identity. Participants will choose to identify as White/Caucasian, Black/African American, Hispanic/Latino, Asian/Pacific Islander, or Mixed/other.

Data Analysis

I examined potential differences in various measures of mental health in relation to the type of high school the participants attended. The type of school (LGBT high school, GSA+, GSA-) served as the independent variable; scores obtained from the STAI, CESD-R, IHP-R, RSE, and SWLS were dependent variables.

After the data were cleaned, explained in detail in Chapter 3, I ran a one-way analyze of variance (ANOVA) with birth sex as the independent variable and mental health as the dependent variable to determine if birth sex explains a significant variance in mental health. Next, I ran another one-way ANOVA to determine if race (White, non-White) is a significant factor in mental health.

In order to examine the main effects of school type on the five measures of mental health, I performed a series of five separate ANCOVAs. Mental health measures were entered as the dependent factors. Covariate variables that were found to explain some of the standard error were included as covariate variables. School type was entered as the fixed factor.

Definition of Terms

Evaluative Functions: Attitudes that are ends in themselves because of perceived association with rewards or punishments (Herek, 1986). Experiential/specific functions explain attitudes that involve an exception to some schema or belief such as a Caucasian man likes an African American man, but still sees African American men in general as bad (Herek, 1986). The opposite of experiential/specific is experiential/schematic, whereby the experience with one person is generalized to the group of which that person is a member (Herek, 1986). An example would be a Caucasian man having a positive

experience with an African American man, and then believing he would have similar experiences with other African American men as well. Finally, an anticipatory-evaluative function describes a situation in which a person holds an attitude about something or someone based on some future utility (Herek, 1986).

Expressive Functions: Attitudes that are expressed as a means to an end, namely to secure social support (social expression), increasing self-esteem (value expressive), or reducing anxiety (Herek, 1986).

Heterosexism: A combination of homophobia, the fear, hatred, and prejudice individuals direct toward persons who are LGBT, or are suspected of being LGBT, as well as the denial of rights and privileges to LGBT people (Simoni & Walters, 2001).

Lesbian, Gay, Bisexual, Transgender, Questioning (LGBT): As used in this study, LGBT refers either to any person who is not exclusively attracted to members of the other biological sex or people whose birth sex does not match their gender identity (transgender or gender queer).

Mainstream High Schools: As used in this study, a mainstream high school is any GSA+ or GSA- public high school within the United States.

Mental Health: As used in the study, mental health includes measures of anxiety, depression, internalized homophobia, self-esteem, and life satisfaction.

Positive School Climate: A positive school climate includes GSAs or similar clubs, antibullying policies that specifically mention sexual orientation/gender conformity, supportive staff, and curricula that includes lesbian, gay, bisexual, and transgender (LGBT) topics (GLSEN, 2012).

Assumptions

It is assumed that LGBT high schools had a more positive school climate for LGBT high school students than mainstream high schools. Elements identified by GLSEN as contributing to a positive school climate include access to LGBT curricula, supportive teachers and staff, and comprehensive antibullying policies (GLSEN, 2012). It is assumed that mainstream high schools had some elements of a positive school climate, but not as many, or to the same degree, as LGBT high schools. For instance, one study found that only 9% of a sample of Arkansas librarians and school technologists had ever attended a professional development session that covered LGBT issues or topics (Rickman, 2015). It is assumed that participants answered truthfully when completing the online survey. This is a necessary assumption since individuals completing the online survey will be unknown to the author.

Scope and Limitations

In order to make an accurate comparison, and to increase external validity, participant schools need to be as similar as possible. Public, brick-and-mortar high schools are generally required to enroll students within the schools' attendance area. Unlike private schools, public schools are free and cannot turn students away because the students do not meet a certain academic or behavior threshold. Online schools, even if public, do not involve the same level of student interaction; therefore, comparing levels of bullying between students attending brick-and-mortar schools and students attending online schools would be nonsensical.

To reduce the chances of a confounding variable, students from LGBT high schools, GSA+, and GSA- will be matched by biological sex, gender identity, gender conformity, sexual orientation, and race. Depending on the number of participants, categories may need to be collapsed (e.g. race may be collapsed to White and non White) in order to achieve statistical significance. Since the sample size is expected to be small, other potential covariate variables (e.g. student and parent religiosity) will not be included.

Limitations

This study was limited to young adults who self-identify as LGBQ (Kinsey scale 1-6) or are transgender/gender queer. It is possible that some students who identified as completely heterosexual are LGBT. However, it is beyond the scope of this study to ferret out LGBT people who still choose to present as heterosexual. Since identifying oneself as LGBT is a step toward self-acceptance, it is possible that study participants will be slightly better adjusted than LGBT people who choose to self-identify as heterosexual, such as men who have sex with men (MSM) and women who have sex with women (WSW). This study will also be limited to those students who report being born either male or female. Nonpublic or online schools were not included in this study.

Potential Generalizability

While today there are very few LGBT high schools, more may open within the not too distant future. Since the focus of LGBT high schools is on the needs of LGBT students, it is assumed that most future LGBT high schools will provide a more positive

school climate to LGBT students than mainstream high schools, whose focus is primarily on heterosexual students and heteronormative curriculum and experiences.

Potential Biases

This survey asked participants (young adults ages 18-23) to complete a series of mental health inventories. In order to increase the number of participants the study survey was posted on two subreddit discussion boards. Some participants posted messages and comments about the survey that could be seen by potential participants that had yet to complete the survey.

Study Significance

GSAs on high school campuses are associated with higher levels of LGBT student mental health (GLSEN, 2012; Heck et al., 2013). However, an extensive literature review was unable to locate any study that involved students who had attended a LGBT high school. This study will address this important gap in the literature.

Dropping out of high school can have dire consequences for both the individuals who drop out and their communities as a whole. As a group, individuals who drop out of high school earn less money than those who complete high school (Oreopoulos, 2006), report lower levels of happiness (Oreopoulos, 2007), commit more violent crimes (Ikomi, 2010), and suffer poorer physical health (De Ridder et al., 2013).

Teasing and bullying have been positively associated with dropping out of high school (Cornell, Gregory, Huang, & Fan, 2013). Cornell et al. found that a one standard deviation in perceived teasing and bullying was associated with a 20% increase in high school dropout rate.

In 2011, the GLSEN polled more than 8,500 LGBT youth (ages 13-20) residing in all 50 U.S. states (GLSEN, 2012). More than 80% of those surveyed reported being verbally harassed and close to 40% reported being physically assaulted. Less than 40% of those harassed chose to report the harassment to school officials for fear that either nothing would be done or the situation would be made worse (GLSEN, 2012).

Among LGBT students, those who are gender nonconforming are more likely to be victimized at school (Toomey et al., 2013), and are at an increased risk of dropping out of high school (Cornell, et al., 2013). In 2003, the first LGBT high school opened in the Northeast United States; 2 years later a second LGBT high school opened in the Midwest (Kirchick, 2003; Pardini, 2013). Currently, there are only two LGBT public high schools in the United States.

Many of the students choosing to attend one of the two LGBT high schools would have dropped out from high school if they could not attend those schools (Branigan, 2003; Pardini, 2013). I attempted to show a positive association between attending a LGBT high school and better mental health. If this association is established, more LGBT high schools might open, thereby increasing the number of LGBT students who could choose to attend a LGBT high school. This would be a positive social change.

Summary

LGBT students are frequently bullied by high school peers (GLSEN, 2012). Herek's neofunctional theory suggests that some peers bully less dominant students as a way to gain or maintain social status within their peer groups (G. M. Herek, 1986). Herek's sexual stigma theory posits that LGBT students may be less likely than other

minority groups to retaliate than other minority groups in part because LGBT students see harassment as part of being LGBT (G. M. Herek, 2007).

Students who are bullied are at an increased risk of suffering from a wide range of mental health problems (Mayberry, 2013). LGBT students who attend a high school with a GSA on campus experience less peer bullying and report better mental health than LGBT students attending a high school without a GSA on campus (GLSEN, 2012). However even those schools with a GSA on campus often do not provide access to LGBT curricula or have comprehensive antibullying policies (GLSEN, 2012).

Students attending LGBT high schools are not bullied as often for perceived sexual orientation or gender identity as LGBT students attending other high schools (Pardini, 2013). Furthermore, the curricula at LGBT high schools are designed to meet the needs of LGBT students, and classes are taught by teachers who want students to succeed (Pardini, 2013).

I compared former students of LGBT high schools with similar high school graduates of mainstream high schools. If this study finds an association between attending a LGBT high school and better mental health school districts may consider opening a LGBT high school within their attendance areas.

Chapter 2: Literature Review

Introduction

Bullying is a major problem in middle and high schools. In 2005, the results of a GLSEN and Harris Interactive survey found that over 1.6 million public school students were bullied because of actual or perceived sexual orientation (Elia, 2010). Despite laws,

school policies, and antibullying programs, LGBT students continue to be bullied more often than other student groups (Sohaili, 2011). Herek's neofunctional theory explains that bullies have plenty of reasons to bully despite the inherent risks, such as school suspension or retaliation (Herek, 1986). The sexual stigma theory, also posited by Herek, explains how bullying affects not only the victims, but also the bullies themselves (Herek et al., 2015a). The basis of this study will include a comparison of the mental health of LGBT adults (18-23) who had recently graduated from one of three school types: high schools without a gay-straight alliance on campus (GSA-), high schools with a GSA on campus (GSA+), and LGBT high schools.

This chapter begins with the literature search strategy used for this chapter, followed by a brief background section. Bullying will be discussed in detail, including sections describing the types of bullying. Herek's two theories, mentioned briefly in Chapter 1, will be expanded upon followed by a description of LGBT high schools and GSA chapters. Studies involving GSAs will be discussed; the chapter will conclude with a section detailing problems with studies involving GSAs and a review of the variables that will be used in this study, and why those variables were chosen.

Literature Search Strategy

A search of literature was conducted digitally through electronic psychology and medical databases such as PsycINFO, PsycARTICLES, MEDLINE, and CINAHL, Academic Search Complete, and LGBT Life with Full Text. The list of search terms used to conduct this literature review included: *LGBT, high school, students, anxiety, depression, bullying, Herek, homophobia, sexual orientation, gender, and sodomy*. The

literature search included material from the early 1900s up through the year 2015. The search was limited primarily to journal articles, although magazine articles were accessed in order to locate information about predominately gay high schools. The frequency and level of bullying based on LGBT sexual orientation or nonconforming gender expression/identity is predicted to be a major difference between schools with and without GSAs and LGBT high schools.

Background

In the 1980s, high schools in Los Angeles and Boston noticed that LGBT students needed additional support and decided to do something about it (Currie et al., 2012). Gay-straight alliances were formed to provide LGBT students with a place on campus where they could feel safe interacting with each other without fear of being bullied (Currie et al., 2012). Since that time, researchers have found that LGBT students attending high schools with GSAs were better psychologically-adjusted than LGBT students attending high schools without a GSA on campus (Toomey, et al., 2011). Despite the apparent successes of some GSAs on reducing bullying and making school a safer place for LGBT students, there are limits to the influence many GSAs can have on school policy and programming (Walls et al., 2013a).

In 2003, the first publically funded high school in the United States to enroll primarily LGBT students opened in the Northeast United States (Rivard, 2003). Two years later a second LGBT high school opened in the Midwestern United States (Pardini, 2013). While LGBT high schools can likely provide a learning environment with less bullying based on sexual orientation or gender expression/identity, it is possible that these

students face other stressors not faced by their counterparts at mainstream high schools. Students at LGBT high schools may also be less gender conforming than LGBT students at mainstream high schools; studies have shown that gender nonconforming students are less socially accepted by both heterosexuals and LGBT people alike (Clarkson, 2006; G Rieger & Savin-Williams, 2012).

Aggression, School Victimization, and Bullying

Both primary and secondary aggression can be the root of victimization (Karpman, 1950). At the most basic level, aggression can be seen as the opposite of rest (Karpman, 1950). Karpman labeled actions that are taken to satisfy a need state have been labeled primary aggression. Victimization has been defined as “harms that occur to individuals because of other human actors behaving in ways that violate social norms” (Finkelhor & Kendall-Tackett, 1997, as cited by Katz-Wise & Hyde, 2012, p. 2). School victimization is victimization that occurs on a school campus.

School victimization can be rooted in either primary or secondary aggression. If an older child steals lunch money from a younger child, this is a form of primary aggression, also known as proactive aggression (Karpman, 1950). The money that is obtained by the older child will allow him to satisfy a need state, if not immediately, in the near future. If instead of handing over his money, however, the younger child fights back, this could be described as secondary, or reactive, aggression (Karpman, 1950). Although the words bullying and school victimization are often used interchangeably, they are not synonymous. Bullying is a subset of school victimization and is defined as intentional aggressive behavior repeated over a period of time, where there is a power

imbalance between the person bullied (victim) and the perpetrator (bully)(Shaw, Dooley, Cross, Zubrick, & Waters, 2013).

The Bullying Problem

Bullying is a serious problem in U.S. schools. In 2008, 35% of surveyed 9th-12th grade students reported being in a physical fight within the previous year (Centers for Disease Control, 2008). In 2009, approximately 20% of students surveyed as part of the Youth Risk Behavior Surveillance System reported being bullied at school (Centers for Disease Control, 2009). During that same year, homicide was listed as the second leading cause of death among 10- to 24-year-olds (Centers for Disease Control, 2009). In the 41 school shootings between 1974 and 2000, 71% of the shooters had been victims of bullying (Jordan & Austin, 2011).

Bullying is purposeful, and those who bully do so because they believe they have more to gain than lose (Kalman, 2013). Students involved in bullying tend to fit specific bully, passive-victim, or bully-victim profiles (Koiv, 2012). Bullying can take many forms and have a host of short- and long-term consequences for everyone involved (Jordan & Austin, 2011). Despite the fact that most states and schools districts have adopted strict antibullying policies and have purchased expensive antibullying programs, bullying still continues (Kalman, 2013).

While the study of bullying is a relatively new phenomenon, bullying itself is a very old problem (Olweus, 1994). *The Epic of Gilgamesh*, an ancient narrative, is a story centered around bullying (Mitchell, 2004). In a study conducted in 1945, children were asked to name social factors that they hated. Bullies were identified by 56% of boys

(second highest percentage) and by 48% of girls (eighth highest percentage) as an undesirable social factor (Zeligs, 1945).

Why Kids Bully

Adolescents primarily bully other children to earn or maintain social status within their peer group (Sijtsema et al., 2009a) and to attract the attention of romantic interests (Sijtsema et al., 2009a). Adolescent girls are often attracted to more aggressive boys because peer group leaders are often aggressive (Turkel, 2007). Boys want to date popular girls; attractive girls become popular by using relational aggression to win status over other attractive but less socially-adept girls (Peeters et al., 2010).

Although adolescents may feel they need to bully in order to earn or maintain social status, bullies cannot bully everybody, and cannot bully all the time. Bullying usually takes place within relatively small and stable settings (Camodeca & Goossens, 2005). According to the tripartite belief model developed by Gottheil and Dubow (2001), bullying behavior is most likely to occur when three beliefs exist: (a) a normative belief, it is acceptable to bully the intended victim; (b) a self-efficacy belief, it is possible to bully the intended victim; and (c) an outcome-expectancy belief, more good than bad will come from bullying the intended victim.

Gottheil and Dubow's 2001 study involving 120 fifth and sixth graders supported the tripartite belief model (Gottheil & Dubow, 2001). Bullies, more than less-aggressive peers, felt not only that aggression was good, but also that weakness was bad (Gottheil & Dubow, 2001). Bullies specifically target peers perceived as weak rather than others who were simply less strong or aggressive (Gottheil & Dubow, 2001).

Bullies also must feel that they could be successful in bullying the intended victim (Gottheil & Dubow, 2001). Bullies would be less likely to victimize a peer who was disliked if the peer could possibly defend himself, or worse, defeat the bullies (Gottheil & Dubow, 2001). Bullies would be less likely to engage in bullying behavior if they were likely to be caught in the act (Gottheil & Dubow, 2001). For this reason, bullying often takes place during specific time periods and places where supervision is lacking (Gottheil & Dubow, 2001). Bullies must feel that the bullying act will result in a net positive situation, whereby the total amount of benefit outweighs the total cost (Gottheil & Dubow, 2001). Bullies have been known to victimize students, for instance, even when they were sure that they would be punished (Franklin, 2013).

Profiles of Students Involved in Bullying

Students involved in bullying often have problems interpreting social cues (Ball et al., 2008). They tend to be impulsive, angry, and often come from dysfunctional families. Bullies also tend to be more morally disengaged from classmates than non-bullies (Menesini, Palladino, & Nocentini, 2015). Genetics plays a large role in determining later bully and victim identities with environmental factors being associated with the remaining variance (Ball et al., 2008). There are important differences between pure bullies (those that only bully), pure victims (those that are only victims of bullying), and bully-victims (those who bully some children, but are bullied by other children; Ball et al., 2008). There are a variety of involved students who play a more supportive role in acts of bullying (Olweus, 2003).

Approximately 15% of adolescents are pure bullies (PB; Turkel, 2007). Pure bullies, as compared with other involved students, are more narcissistic and more verbally persuasive (Fanti & Kimonis, 2013). Pure bullies use proactive aggression to meet their needs for social dominance (Fanti & Kimonis, 2013). Proactive aggression is defined as a goal-directed, deliberate, and cold-blooded action that is useful to achieve goals; proactive aggression requires no stimulus; the aggressive act is sometimes done simply for the pleasure or satisfaction it brings the bully (Boulton & Smith, 1994; Crick & Dodge, 1996; Roland & Idsoe, 2001).

Fanti and Kimonis (2013) found that youth (such as many bullies) scoring high on narcissism have a strong feeling of entitlement combined with a willingness to exploit others for personal gain. Maintaining a position of dominance over others often necessitates a high level of planning and control. Pure bullies and followers often use verbal persuasion as a way to meet their needs for social dominance within their peer group.

Pure bullies can be popular or unpopular. Popular bullies socialize with other popular children, while unpopular bullies use aggression as a way to get attention (Smokowski & Kopasz, 2005). Pure bullies tend to engage in frequent excessive drinking and other substance use more often than the passive victims (PV) or bully-victims (BV). Pure bullies and bully-victims often feel less connected to the school.

One-third of pure bullies met the diagnostic criteria for attention-deficit disorder, 12.5% for depression, and 12.5% for oppositional-conduct disorder (Kumpulainen, Rasanen, & Puura, 2001, as cited by Smokowski & Kopasz, 2005). However, bullies

reported greater ease at making friends than other youth (Nansel et al., 2001, as cited by Smokowski & Kopasz, 2005). Bullies also tend to be underachievers in school (Smokowski & Kopasz, 2005).

Oftentimes, pure bullies come from families with hostile, rejecting, or indifferent parents. The father may be weak or frequently not at home. Parents of bullies tend to use power-assertive techniques to manage behavior. Punishment is often physical or involves angry, emotional outbursts (Smokowski & Kopasz, 2005). Bullies had higher scores of avoidant-insecure attachment style compared with victims and uninvolved students (Koiv, 2012).

Longer-term consequences of bullying include criminal convictions and antisocial development in adulthood (Kaltiala-Heino et al; Olweus, 1994; Pulkkinen & Pitkanen, 1993, as cited by Smokowski). Former bullies were four times more likely to have been convicted of any crime and from six to eight times more likely to be convicted of a violent crime in the 8 years between the ages of 16 and 24 (Olweus, 2011). Children who were bullies tend to have children that are bullies, thereby perpetuating the cycle. They also are more likely to be aggressive with their spouses and use severe physical punishment on their children (Smokowski & Kopasz, 2005).

Approximately 10% of children are PV (Turkel, 2007). PVs tend to be rejected not only by peers, but by teachers as well, oftentimes because they are hyperactive and impulsive (Turkel, 2007). PVs tend to be weak, small, and frail, stocky, and/or unattractive. They tend to initiate conversations with peers less frequently than other

children, and seem more comfortable talking with adults (Smokowski & Kopasz, 2005).

PVs often find themselves abandoned on the playground by their peers.

PVs report feeling sad when something unpleasant happens more often than other children (Camodeca & Goossens, 2005). PVs tend to be more quiet, cautious, anxious, insecure, and sensitive than most other children. In elementary school, PVs tend to perform average or better, but slip behind in middle school.

PVs may have fear of getting hurt or have a negative attitude toward violence, and are often unsuccessful in sports (Smokowski & Kopasz, 2005). PVs tend to suffer from poor self-esteem and lack assertiveness to stand up for themselves. Parents of PVs tend to be overprotective and sheltering, and are often overinvolved in their children's activities (Smokowski & Kopasz, 2005). The attachment style of PVs was more insecure compared with bullies or uninvolved students.

Short-term consequences for PVs included skipping school, anxiety, depression, reduced academic performance, increased apprehension, loneliness, feelings of abandonment, and suicidal ideation (Smokowski & Kopasz, 2005). Longer-term consequences included poorer self-esteem, problems in sexual relationships, and being overprotective with their own children, thereby continuing the cycle (Smokowski & Kopasz, 2005).

BVs are children that are both bullies and victims; approximately 3% of children are BVs. BVs tend to be the least-liked and most victimized subgroup. BVs also have more internalizing and externalizing problems than any other subgroup of children (Lester, Cross, Shaw, & Dooley, 2012). Most BVs have low self-esteem, high

neuroticism, and deficits in problem-solving ability. BVs view themselves as more troublesome, less intellectual, less physically attractive, more anxious, less popular, and unhappier than PB (O'Moore & Kirkham, 2001 as cited by Smokowski & Kopasz, 2005)

BVs are also more callous and unemotional, and have more conduct problems than PB (Fanti & Kimonis, 2013). BVs have more problems related to alcohol use, eating disorders, delinquency, violations of parental rules, and weapon carrying. Since BV is a relatively new category of bullying, longer-term consequences are not yet known (Smokowski & Kopasz, 2005). BVs often come from homes with inconsistent parenting styles. At times, parents of BV are overprotective, while at other times they are neglectful (Smokowski & Kopasz, 2005).

Pure bullies, PVs, and BVs are the children most involved in bullying; other children serve in supportive-type roles (followers, defenders, or outsiders), while many children are simply not involved (Smokowski & Kopasz, 2005). While considerably less literature is written about children in these roles, one study ($N = 226$) of fifth- and sixth-grade Dutch students, found important differences between bullies, victims, supporters, and uninvolved children (Camodeca & Goossens, 2005). In this study, 21 students (9%) were classified as bullies (high on anger, hostility, and retaliation; lower on sadness), and 35 students (15%) were classified as victims (highest on hostility, retaliation, and sadness; high on anger). Three students were classified as bully-victims, but since this represented a very small sample they were not included in the study.

Camodeca and Goossens (2005) found that followers were similar to bullies, but had less anger and hostility; followers made up 18% of the sample. Defenders were

similar to followers except they were higher on sadness (a measure of victim empathy) and lower on retaliation. Defenders were the most popular children of any group, and represented 21% of the sample. Outsiders were average onlookers; they were at the midpoint on hostility and anger, a little lower on sadness, and a little higher on retaliation. Outsiders made up the largest group of children, 23% of the sample. Uninvolved students were lowest on hostility and anger and low on sadness and retaliation as well. They represented 14% of the student sample. Jordan and Austin (2011) suggested that bystanders can be grouped into three types: ambivalent bystanders (willing to work with adults to make the bullying stop), victim bystanders (students too afraid to stand up to the bully, and become participants through passivity and silence), and bully bystanders (students who set the victim up to commit acts for which the bully bystanders does not want to be held responsible)

Bullying is a complex problem. Genetics and parents predispose some students to bully. Given the right set of circumstances, potential bullies move into action. Bullies need victims, and once again, genetics and parents play a vital role in determining which children will be the most likely targets of various forms of bullying.

Forms of Bullying

Bullying can take many forms. The most obvious type, physical bullying, includes anything from pushing, punching, or kicking, to homicide (Vivolo, Holt, & Massetti, 2011). Low popular-low socially intelligent bullies tend to be more physically aggressive than other bullies (Peeters et al., 2010).

Nonphysical bullying typically includes verbal, social, and relational bullying; cyberbullying, a relatively new form of bullying is often described separately from other forms of nonphysical bullying. Sexual harassment has also been listed in some studies as a form of bullying. Baton-bullying, or multi-aggressor bullying, involves bullies taking turns victimizing the same child (Franklin, 2013).

Verbal bullying, since it happens rapidly, is hard to detect (Smokowski & Kopasz, 2005). Verbal bullying usually includes behaviors such as name calling or teasing (Low & Espelage, 2013). Popular-socially intelligent bullies were more verbally aggressive than other girls (Peeters et al., 2010). Relational bullies convince others to exclude certain children. This is used more often by unpopular-less socially intelligent bullies (Peeters et al., 2010). Social bullying involves covert aggressive attacks, such as gossiping (Peeters et al., 2010). This is used more often by more popular, socially-intelligent bullies.

Cyberbullying is a relatively new form of bullying. There are at least eight types of cyberbullying, including flaming (insulting someone in a chatroom), impersonation, trickery, cyberstalking, outing, harassment, denigration (e.g. digitally altering someone's photo), exclusion, and happy slap (capturing violence on a cellphone and uploading to a website; Jordan & Austin, 2011).

Cyberbullying can be an especially heinous form of bullying. First, as many as 72% of high school students have experienced some form of cyberbullying (Elípe, Mora-Merchán, Ortega-Ruiz, & Casas, 2015). Second, unlike other forms of bullying, a single instance of cyberbullying can live on forever and be seen by a large number of people (Elípe et al., 2015). Finally, the effects of cyberbullying can be just as damaging as other

forms of bullying, but often require much less effort on the part of the perpetrator (Elipse et al., 2015). Some groups are more likely to participate in cyberbullying than others.

African Americans are more at risk for cyberbullying, especially when coupled with more risk factors (family violence, alcohol and drug use, hostility) and fewer protective factors (parental monitoring and empathy; Low & Espelage, 2013). By middle school, females were more likely to engage in cyberbullying than males. While various programs and laws, discussed next, can stop or reduce some forms of bullying, other forms of bullying, *e.g.* relational bullying or exclusion, are much harder to control.

Laws, Rules, and Programs

There are several laws addressing bullying, but few relate directly to students who identify as LGBT. Title IX of the Patsy T. Mink Equal Opportunity in Education Act prohibits discrimination in schools based on sex (Sohaili, 2011). In the case of *Davis v. Monroe County Board of Education*, Title IX was found to apply to sexual harassment that occurs in an educational setting (Sohaili, 2011). In the case of *Montgomery v. Independent School District* Title IX was extended to include harassment based on gender expression.

In 2006 Title VII of the Civil Rights act of 1964, which prohibits discrimination on the basis of one's sex, was found to apply also to discrimination based on gender non-conformity, though not sexual orientation (Peebles, 2015). In *Vickers v. Fairfield Medical Center*, the Sixth Circuit court found that discrimination must be based on observable [non gender-conforming] behavior, not merely on the perception that an individual is homosexual (Peebles, 2015).

Harassment and discrimination (heterosexism) also exists in the workplace and in society at large. Recently, courts have sided with LGBT people and extended benefits and protections that once were available only to the heterosexual majority. In 2013 the U.S. Supreme Court struck down the Defense of Marriage Act (DOMA) finding that the Fifth Amendment prohibits the Federal Government from recognizing some marriages but not others (Peebles, 2015). On June 26, 2015, the U.S. Supreme Court sided with fourteen same-sex couples and overturned all state marriage laws that prohibited same-sex couples from marrying (U.S. Supreme Court, 2015).

While the political climate for some LGBT people is improving, bullying and violence toward some segments of the LGBT population continues. In 2013, a boy wearing a skirt on a public bus in Oakland, California suffered third degree burns when another passenger set his skirt on fire (Morrison, Farberov, & McCormack, 2013). In 2014, *The Advocate* reported that 12 transgender women had been killed during that year alone; to date, there have been 10 transgender women killed in 2015 (Blake, 2015a).

In an effort to ward off violence at school, many districts have purchased antibullying programs. Many of these programs tend to be very expensive, and often require a good portion of the staff to participate (Kalman, 2013). Smith, Schneider, Smith, and Ananiadou (2004) found that 14% of published studies showed a minor reduction in bullying, and none showed a major reduction in bullying (Kalman, 2013).

Kalman found that many of the antibullying programs not only make little impact on levels of bullying, but also may create additional problems as well. If teachers are required to use class time to implement an antibullying program, then time is taken away

from the academic content of the class. Labeling children *victims* or *bullies* can bring on a host of problems for both groups of children. Furthermore, in schools with low incidences of overt bullying those children who are bullied are likely to blame themselves for their own mistreatment (Schacter & Juvonen, 2015)

A more recent approach has been to provide group counseling to sexual minority youth (SMY; Craig, Austin, & McInroy, 2014). Preliminary results suggest that teaching coping strategies is associated with significantly higher levels of self-esteem but no change in school connectedness (Craig et al., 2014).

While laws, school policies, and antibullying programs may reduce overt forms of bullying, other forms of bullying remain. While Greenwald and Pettigrew focused primarily on racial discrimination, bullying in the form of social exclusion (e.g. not inviting LGBT students to events or parties, not adding LGBT students as friends on Facebook or other social media sites) seems almost impossible to eradicate. Most school administrators would probably not consider social exclusion as a form of bullying, likely because there is nothing the administration could do to stop it.

Despite the best efforts of governmental agencies and school administrations, bullying continues. Many LGBTQ students are able to hide their sexual orientation to avoid being bullied; others either can't or choose not to. The next section will discuss bullying as it relates to LGBT high school students.

LGBT Students and Victimization

Kosciw et al. (2012) compared various forms of LGBT bullying from 2001-2009. The study, which involved 17,414 LGBT students (ages 12-21) from all 50 states and the

District of Columbia, found that in 2009 close to 70% of the student sample had frequently heard homophobic remarks. However, only 25% of the students reported being verbally harassed because of sexual orientation, and only about 12% reported verbal harassment due to gender expression (Kosciw et al., 2012). Close to 10% of the student sample were physically harassed because of perceived or actual sexual orientation, while about 4% were physically harassed because of gender expression (Kosciw et al., 2012).

Kosciw et al. (2012) clarified that the majority of LGBT students are not verbally or physically harassed because of their sexual orientation or gender expression. There are several possible reasons why more LGBT students are not verbally or physically harassed. While many LGBT students come out to someone, few LGBT high school students make their sexual orientation known to everybody (Frost & Bastone, 2008). It is likely that gender nonconformity, more than sexual orientation, is predictive of being bullied (Frost & Bastone, 2008). Many, if not most, LGBQ students conform to gender expectations to avoid being bullied.

Gender nonconforming students are not only more likely to be bullied by heterosexuals, but are also likely to be alienated by the LGBQ population as well. Gender nonconforming students often find themselves excluded from peer groups and harassed not only because they are perceived to be LGBT but, more importantly, because they violate expected gender role behavior (G Rieger & Savin-Williams, 2012). Greenwald and Pettigrew (2014) found that in-group favoritism is a much more common form of discrimination than is out-group hostility.

Risks Associated with Victimization

Victims of bullying are more likely to present with various forms of internalizing disorders. A 2010 study of 1,559 grade 10 high school students found a significant association between victimization and depression; those bullied more frequently had higher levels of depression (Luk, Wang, & Simons-Morton, 2010). A 2011 study of 245 LGBT young adults between the ages of 21-25 found that females reported less depression, less suicidal ideation, greater life satisfaction, greater self-esteem, and greater social integration (Russell, Ryan, Toomey, Diaz, & Sanchez, 2011). However, once the variance explained by LGBT school victimization was accounted for, female-male differences were dramatically reduced on each of the dependent variables. Russell et al. suggested that that (a) men are subjected to more LGBT school victimization than women, (b) LGBT school victimization affects men more than it does women, or (c) men are both subjected to more LGBT school victimization and are also affected more by LGBT victimization.

A 2014 study suggests that verbal and relational bullying, and to a lesser extent physical bullying, are positively associated with negative self-cognitions and negatively associated with positive self-cognitions, even after controlling for current depressed mood (Cole et al., 2014a).

There are statistically significant between group differences between young adults who reported moderate victimization compared with young adults who reported high victimization on several key dependent variables: depression, suicide attempts, suicide attempt requiring medical attention, heavy drinking within last 6 months, substance abuse problems, STD diagnosis, and reported HIV risk within last 6 months (S. Russell et al.,

2011). The effects of LGBT high school victimization don't abruptly end upon high school graduation, but rather continue into young adulthood. Furthermore, high levels of victimization are associated with greater levels of depression, suicide attempts, drug and alcohol use, and high risk sexual behavior (Russell et al., 2011).

Another study of 13,921 high school students asked participants how often they were teased, threatened, or harassed about being gay, lesbian, or bisexual (Espelage, Aragon, Birkett, & Koenig, 2008). The response choices ranged from never to very often. As expected, the association between sexual orientation and homophobic teasing was significant, as was the association between sexual orientation and peer victimization. Espelage et al. explored the association between sexual orientation status and depression/suicidal ideation. Again, the association was significant. There were also significant associations between sexual orientation and alcohol/marijuana use and school climate.

Questioning youth who were teased and victimized were more likely than LGB students to use alcohol and marijuana, and were more likely to rate the school climate as negative (Espelage et al., 2008). Espelage et al. surmised that questioning students may not have the same level of social support as LGB students have. Russell et al. (2011) also found that students identifying as queer reported more LGBT-related victimization than students identifying as LGBT.

Hatzenbuehler, McLaughlin, and Nolen-Hoeksema, in a 2008 longitudinal study of 1,071 middle school students (ages 11-14) found that sexual minority youth were more likely to have emotional regulation deficits, rumination and low emotional awareness,

than heterosexual peers. Emotional regulation deficits were associated with higher levels of depression and anxiety (Hatzenbuehler et al., 2008). Poorer emotional regulation could be associated with peer victimization and family rejection (Hatzenbuehler et al., 2008).

A more recent study that involved 128,681 Minnesota 6th, 9th, and 12th graders suggested that youth who are bullied are more likely to use alcohol and illicit substances (Gower & Borowsky, 2013). Compared with students who were never bullied, ninth grade and twelfth grade students who were bullied only once or twice were statistically more likely to use alcohol, tobacco, and marijuana (Gower & Borowsky, 2013). High school students who are bullied are more likely to present with a wide range of mental health and substance use problems. Bullied students are also more likely to engage in unsafe sexual behaviors which increase the chances of contracting various sexually transmitted diseases and HIV (Russell et al., 2011).

A 2015 study found that even after controlling for being bullied, LGB youth of all races and genders were more likely than their heterosexual peers to report suicidal ideation (Mueller, James, Abrutyn, & Levin, 2015). Another study suggests that there is a direct path between victimization in childhood and internalizing disorders in adulthood (McDougall & Vaillancourt, 2015).

Not all LGBT students are bullied in high school; many heterosexual students are bullied as well. Overweight children, for instance, are routinely bullied by high school aged peers (Puhl & Luedicke, 2012), as are racial minorities and students of lower socioeconomic status (Peskin, Tortolero, & Markham, 2006). However, unlike many heterosexual students, all LGBT students have a concealable stigma. A concealable

stigma is a stigma that can be, but is not necessarily, hidden from others (Frost & Bastone, 2008). Some LGBT students choose to tell everyone of their sexual minority status, while others keep their sexual orientation a closely guarded secret (Frost & Bastone, 2008). Still other LGBT students choose to tell only a few close friends.

Frost and Bastone (2008) suggested that there are advantages to remaining in the closet; but, there are also disadvantages. There are also advantages and disadvantages to coming out. For many LGBT students deciding whether to come out or remain closeted is not a choice that is made only once; it is a choice that is made many times throughout one's high school career (Frost & Bastone, 2008). The next section will discuss the advantages and disadvantages to both coming out and remaining closeted

To Come Out, or Not To Come Out

Many LGBQ high school students choose to remain closeted. A study of 85 self-identified LGB high school students suggests that students who tell others of their sexual minority status were more likely to cut school or miss class ($p=.007$), and more likely to be depressed ($p=.009$; Frost & Bastone, 2008). LGBT students who felt other students could tell they were a sexual minority were more likely to be verbally or physically abused ($p<.001$; Frost & Bastone, 2008). Concealing one's sexual minority status explained approximately 13% of the variability in depression, 23% in abuse, and 28% in absences (Frost & Bastone, 2008).

LGBT students who conceal their LGBT sexual orientation are also at risk for lowered self-esteem, since their values are at odds with the heterosexual majority with

whom they identify (Lönqvist et al., 2009). Likewise, self-esteem may be artificially boosted by refusing to believe that one is really LGBT (Lönqvist et al., 2009).

A 2008 study of 959 gay and lesbian men and women found strong support for the construct of coming out growth (COG; Vaughan & Waehler, 2010). Briefly, COG can be explained as psychosocial growth that is associated with stress related to coming out. According to this model, LGBT youth and adults who come out experience boosts in authenticity/honesty, biopsychological well-being, personal sexual minority identity, more LGBT-affirming views, a sense of belonging, and a collective LG identity (Vaughan & Waehler, 2010). However, coming out in high school is also associated with victimization (S. T. Russell, Toomey, Ryan, & Diaz, 2014).

Deciding whether to acknowledge one's LGBT status is an important decision that all sexual minority youth need to make. There are long-term benefits to coming out; but, for some LGBT youth, the risk of losing friends and family makes staying in the closet the more preferable option.

LGBT students are victimized whether or not they choose to come out in high school (Russell et al., 2014). Those students who chose to come out in high school are more likely to report higher levels of life satisfaction and lower levels of depression as young adults than students who chose to keep their sexual orientation hidden (Russell et al., 2014). However, peer victimization does suppress some of the positive effect of being out in high school (Russell et al., 2014).

Prejudice Related to Sexual Minority Status

Two theories were developed by Herek in the 1980s. The neofunctional approach discusses individual motivations (functions) for harboring heterosexist attitudes. The sexual stigma theory describes an array of cultural and individual ways in which LGBT are made to feel inferior to heterosexuals. In developing his neofunctional approach, Herek modified works by Allport and Schanck (1936) and Katz (1960) that were developed in the mid-20th century to explain motivations involving racism. Both Allport and Katz recognized that attitudes toward members of out-groups serve a variety of purposes, or functions (Allport & Schanck, 1936; Katz, 1960). In 1950 Allport outlined six approaches to the study of prejudice. Allport identified individual and situational causes of prejudice (Allport, 1950). First, of the individual approaches is known as the stimulus approach, whereby it is determined whether or not prejudice exists (Allport, 1950).

A phenomenological approach explains prejudice that has individual perceptions as its origin (Allport, 1950). Prejudice often involves hyper-focusing on stimuli that maintain the stereotype, while simultaneously ignoring those stimuli that seem to disprove the same stereotype (Allport, 1950). A phenomenological approach illustrates instances of proximate causation; for example, a person chooses not to associate with an African American because his friends might ridicule him (Allport, 1950).

Extropunitiveness is a term used to describe the directing of blame away from oneself; people with authoritarian personalities routinely blame others for their problems, and therefore are more likely to be prejudiced toward members of social out-groups

(Allport, 1950). Situational approaches explain prejudices that manifest outside of the individual; socialization is often the root of these forms of prejudices (Allport, 1950). Situational prejudice often will explain behavior or results that cannot better be explained by individual approaches (Allport, 1950). Sometimes a broader cultural approach offers the best explanation of prejudice. At the height of the Cold War, gay men were linked with Communism (Shibusawa, 2012). Gay men were forced out of government jobs and the military, and subjected to many instances of police brutality and arrest (Shibusawa, 2012).

A historical approach is sometimes needed to examine long-standing prejudices, for instance prejudice directed against Jews and African Americans (Allport, 1950). Dominant political (Assyrians and Babylonians) and religious groups (Christians) have forced Jews to the fringe of society where they have had to occupy low-status positions such as money lenders (Allport, 1950). Enslaved African Americans were routinely assaulted physically and sexually assaulted by their masters (Foster, 2011). Allport explained prejudice in terms distance from the stimulus object. Ten years later, Katz (1960) suggested that prejudice could be explained not by distance from the stimulus object, but by the rewards that could be gained by harboring prejudicial thoughts.

Functional Approach

Katz (1960) identified four attitudinal functions. Like Allport, and later Herek, Katz recognized that it is possible that an attitude serves multiple functions. Attitudes can serve a utilitarian function, whereby people strive to achieve as many rewards from their environment as possible, while at the same time minimizing punishments (Katz, 1960).

People will have favorable attitudes towards people or objects that bring them pleasure, and more negative attitudes toward people or objects that are associated with punishment or pain (Katz, 1960). Generally, the closer, more certain, and more consistent the reward, the more positive the attitude for a certain object will be (Katz, 1960). The same applies for negative attitudes attached to punishments or pain. Attitudes can also serve an ego-defensive function. This type of function serves to protect the individual from acknowledging the truth about himself or the environment (Katz, 1960). Denial, avoidance, or distortion are all examples of methods ways in which attitudes can be manipulated to protect the individual from painful feelings (Katz, 1960).

Sometimes, simply expressing an attitude provides the individual with benefits, as when the very religious individual extolls Biblical teachings or the values of a particular church or faith (Allport, 1966). Katz labeled this a value-expressive function (Katz, 1960). The value-expressive attitude helps the individual move toward becoming more like that which he wishes to be, for example the teenager who dresses to conform with his peer group, while simultaneously breaking away from expectations set by parents or other authority figures (Katz, 1960).

The fourth and final function identified by Katz (1960) is the knowledge function. People need meaning and structure in their lives, and attitudes help people make meaning of new information (Katz, 1960). Herzog (1944, as cited by Katz, 1960) conducted in the early 1940s found that housewives enjoyed soap operas not only because they were entertaining; but because they provided a source for information and advice. The theories put forth by Allport and Katz were used by Herek as a basis for his

neofunctional approach. Herek's sexual stigma theory was based, in large part, on the minority stress theory, described next.

Minority Stress Theory

Minority stress is defined as "psychosocial stress derived from minority status" (Brooks, 1981 as cited by Meyer, 1995, p. 38). Minorities experience stress because their culture, needs, and experience differs from societal structures. Meyer found that internalized homophobia, stigma (expectations of rejection and discrimination), and actual prejudice events predicted psychological distress in gay men (Meyer, 1995). It was estimated that minority stress was associated with a two- to threefold increase in risk for high levels of distress. Internalized homophobia was associated with all five of the distress measures related to psychosocial stress, namely demoralization, guilt, sex problems, suicide, and AIDS-related traumatic stress. Stigma and prejudice events were associated with every distress measure save for sexual problems.

Major Theoretical Propositions and Major Hypotheses

Neofunctional Approach

While Allport and Katz were primarily concerned with racism, Herek (1986) was concerned with heterosexuals' attitudes toward gay men and lesbians. While, for the most part, Herek retained the functions described by Katz, his approach was testable, whereas much of Katz's approach was not. Herek indicated that attitudes belong to one of two classes: expressive and evaluative. Expressive functions are a means to an end, whereas evaluative functions are the end (G. M. Herek, 1986).

Herek (1986) identified three types of expressive functions. Value-expressive functions describe situations where an object (stigmatized person) allows an individual to express an important attitude or belief, and thereafter receive some form of reward, such as an increase in self-esteem or a reduction in anxiety (G. M. Herek, 1986). A religious fundamentalist might disagree with homosexuality in order to assert their religious identity (Meaney & Rye, 2010). Those who emphasized the value of salvation were the most likely to have negative attitudes toward gay men and lesbian women (Vicario, Liddle, & Luzzo, 2005). Those who ranked obedience and national security as important values also tended to have negative opinions of gay men and lesbian women.

A social-expressive function is similar except that instead of the object being relevant to the individual, the object (stigmatized person) instead is relevant to an important person or group (Herek, 1986); a child who believes homosexuality is wrong because his or her parents believe it is wrong (Hans, Kersey, & Kimberly, 2012; Meaney & Rye, 2010). Hetzel (2011) found that participants who viewed a positive opinion poll were more likely to sign a petition supporting a GSA than were the participants that viewed the negative opinion poll or no opinion poll (Hetzel, 2011).

A defense function serves to protect the individual from intrapsychic conflicts; for instance, a person who thinks that he or she may be LGBT might find comfort in expressing heteronormative statements (Herek, 1986). A woman who has same-sex attraction for a coworker might make heterosexist remarks in order to deny her true feelings for her coworker (Meaney & Rye, 2010).

There are three types of evaluative functions. The experiential-schematic (knowledge) function involves attitudes that are based on experience with members of a target population, but then generalized to all members of that population (G. M. Herek, 1986). For instance, if a person were to meet a politician in person, he would then believe that meeting any other politician would leave him with the same impression. The experiential-specific function has the opposite outcome, whereby a person's experience with a member of an out-group does not generalize to other members of that group (G. M. Herek, 1986). If for instance a teenage boy met a friend who he later learned was LGBT, he would believe that his friend was the exception and not the rule.

The final type of evaluative function is termed anticipatory-evaluative. This function differs from the other two evaluative functions in that the individual has not actually interacted with a member of the out-group, but has merely heard about experiences from others (G. M. Herek, 1986). Many people may not have met a LGBT person, so attitudes and thoughts about LGBT people come from stories told to them from others that have met a LGBT.

Stereotyping

An important element in all six approaches is stereotyping. Stereotyping is a maladaptive form of categorization (G. M. Herek, D'Augelli, & Patterson, 1995). Stereotyping begins innocently enough by grouping people into groups based on a common characteristic. For example, men that prefer to date members of same sex over the opposite sex would be assigned to the gay group. Next, other unrelated characteristics

are assigned to that category. Finally, the characteristic would be assigned to all individual members of that category (Snyder, 1981 as cited by Herek et al., 1995).

In a study conducted in the early 1980s, researchers found that students on their campus believed gay men to be theatrical, gentle, and liberated; lesbians were thought to be dominant, direct, forceful, strong, liberated, and nonconforming (Gross, Green, Storck, & Vanur, 1980 as cited by Herek et al., 1995). Stereotypes such as these persist because many heterosexuals only notice characteristics of LGBT people that are congruent with their beliefs (selective perception), and disregard observed characteristics that don't fit the stereotype (selective recall; Herek et al., 1995).

A recent study suggests that if people stereotype LGBT people as violating important values via their sexual behavior they are more likely to believe that LGBT people either choose to be non heterosexual or are non heterosexual as the result of parental upbringing (Reyna, Wetherell, Yantis, & Brandt, 2014)

Sexual Stigma

When discussing the concept of prejudice, the neofunctional approach could be thought to answer the questions who, what, where, and why; the sexual stigma theory, on the other hand, deals primarily with the how. That is, prejudice affects both heterosexuals and LGBTs. Sexual stigma is an umbrella term used to describe an array of cultural and individual ways in which LGBT are made to feel inferior to heterosexuals (Herek et al., 2015). Heterosexism embodies laws, policies, religious teachings, and negative publicity that affirm heterosexuals' dominate position over non heterosexuals (Herek et al, 2015). Psychological (individual) heterosexism manifests itself in three ways: enacted stigma,

felt stigma, and internalized stigma (Herek et al., 2015). Sexual stigma explains benefits and disadvantages for both the aggressors and the victims.

Enacted stigma. Enacted stigma describes ways in which LGBT are made to feel inferior to heterosexuals or other LGBT (Herek et al., 2015a). High school students often hear derogatory words such as *fag*, or *dyke* (Kosciw et al., 2012). Fewer students are physically harassed, and even fewer are physically assaulted because of sexual orientation or gender expression than in years past; however, those that are victimized are often victimized repeatedly (Kosciw et al., 2012). Bullying is a form of enacted stigma.

Herek et al. (1995) identified three reasons (motivations) for violence against LGBT people. Violence can serve a value-expressive function where those that commit violent acts can speak out about their reasons for doing so (Herek et al., 1995). By committing violent acts against an out-group, perpetrators feel a greater sense of group solidarity (Herek et al., 1995). Some violence can be explained as a form of ego defense, whereby perpetrators identify themselves as heterosexual by distancing themselves from LGBTs (Herek et al., 1995).

Felt stigma. Felt stigma describes behaviors that both heterosexuals and LGBT perform or avoid in order to appear heterosexual (Herek et al., 2015). Both heterosexuals and LGBT might avoid physical contact with members of the same sex. Many individuals, heterosexual as well as LGBT, try to appear gender conforming (Herek et al., 2015); some LGBT individuals date and have sexual relationships with people of the opposite sex. A smaller number of LGBTs even will marry people of the opposite sex.

Internalized stigma. Internalized stigma describes the “personal acceptance of sexual stigma as a part of her or his own value system and self-concept” (Herek et al., 2009, p. 34). In heterosexuals, this form of sexual stigma is called sexual prejudice; in LGBT it is known as self-stigma (Herek et al., 2015). LGBTs also can form negative attitudes toward homosexuality in general, as well as to other LGBT people (Herek et al., 2015).

History is replete with examples of heterosexuals stigmatizing LGBTs. What is less known is that often LGBTs treat other LGBTs just as badly. A website was recently developed for straight-acting gay men (Clarkson, 2006). The website home page states,

Straight acting describes gay men who are more masculine than the effeminate stereotypes...not better, just less nelly! This site exists so that you can explore this controversial topic from all angles...pro and con. (Clarkson, 2006, p. 191)

Sexual identity includes both sexual orientation (completely heterosexual to completely homosexual) and gender identity/conformity (Herek et al, 2015). LGBT gender nonconforming individuals are more psychologically distressed than LGBT gender conforming people (Rieger & Savin-Williams, 2012).

Male dominance

Every society, past and present, is dominated by males (Goldberg, 1999). Males, in general, are more aggressive and competitive (male authority) than females (Goldberg, 1999). This male aggressiveness/competitiveness is used to obtain high status positions (male attainment) and high-level governmental or business positions (patriarchy; Goldberg, 1999).

While this theory has many critics (Goldberg, 1999), it offers one viable explanation (along with Herek's neofunctional theory) as to why many LGBT high school students (especially males) are bullied (Goldberg, 1999). Bullies (aggressive males) compete with other males for peer group status; high peer group status means greater access to desirable females (Goldberg, 1999). Non heterosexual males, for reasons identified earlier, are not likely to fight back, and obviously have less interest in impressing female students.

Rational for Choice of Theory

I chose the two complimentary theories by Herek. Herek's (1986) neofunctional theory provides eight motivations (or psychosocial reasons) for heterosexual youth to bully LGBT peers. This theory was chosen because it addresses LGBT people specifically, rather than simply identifying them as one of many minority populations. Unlike many other minority groups, LGBT people are viewed by some as immoral or disgusting because of various religious interpretations of the Bible (Gray, 2009). Other people view LGBT people as responsible for the AIDS epidemic (Herek, 2002).

The sexual stigma theory of Herek et al. (2007) was chosen as a second theory primary because it explains how heterosexism creates a stifling environment in which rigorous adherence to gender conforming behaviors, avoidance of same-sex physical contact, and frequent proof of one's heterosexuality are required of heterosexual youth. Some heterosexual youth (and some closeted LGBT youth as well), respond to this environment by engaging in hate crimes, using antigay terms, and avoiding anyone who

is perceived to be LGBT (Herek et al., 2015). LGBT youth are left to fend for themselves.

The neofunctional theory is useful in helping to explain why GSAs and programs developed to reduce school victimization are not more effective (Herek, 1986). First, LGBT youth who have not come out may choose to not attend GSA functions because they do not want to be labeled LGBT. Second, antibullying programs cannot provide participants with the same psychosocial rewards derived from bullying LGBT youth, namely peer status. The neofunctional theory also can work toward the advantage of LGBT youth that stand up to bullies or serve as leaders of GSA chapters (Herek, 1986). The same value-expressive function that rewards bullies for expressing heterosexist ideals can reward LGBT youth for expressing homophilic opinions (Herek, 1986). The sexual stigma theory is useful because it explains how bullying effects both heterosexuals and LGBT, although in different ways (Herek et al., 2015). The research questions build upon the theory by allowing one to measure how the Life Satisfaction of LGBT is altered when LGBT students attend a school with a positive school climate.

Identification and Definitions of Concepts

Gay-Straight Alliances

In 1972, students at George Washington High School in New York City founded the first GSA student group (Johnson, 2007). The students, mostly African American, felt marginalized by the adult LGBT community, who they saw as ageist, classist, and racist (Johnson, 2007). They felt it was up to them to fight for equal rights in schools (Johnson, 2007). Now there are over 4,000 GSAs nationwide (Poteat, et al., 2012). GSAs have four

roles: providing counseling and support of LGBT students, providing safe space for LGBT students and their friends to socialize, promoting awareness of LGBT safety issues, and helping make the school, as a whole, safer for LGBT students (Griffin, Lee, Waugh, & Beyer, 2004). GSAs should be doing more to challenge heterosexist and heteronormalizing practices, which are the reason that safe spaces for LGBT students are needed in the first place (Currie et al., 2012)..

GSAs

GSAs began in the late 1980s in Boston and Los Angeles (Currie et al., 2012). Initially, most GSAs were teacher- or counselor-led groups designed to provide a safe space for LGBT students and allies to socialize (Griffin et al., 2004). Today, with over 4,000 GSAs in the United States alone, GSAs serve a myriad of purposes (Griffin et al., 2004). In some schools, a GSA may be the school counselor's office where LGBT students can come by for counseling, or meet an hour a week with friends (Griffin et al., 2004). In more progressive areas, GSA leaders may be school representatives at area or even national LGBT conferences (Griffin et al., 2004). Recent studies have shown that heterosexual students may also benefit from having a GSA on campus (Poteat et al., 2013a).

While GSAs have helped many students since their inception over 20 years ago, many students see their school GSA as neither safe nor accepting (Holmes & Cahill, 2004). LGBT students of color often feel rejected by predominately White GSA memberships (Holmes & Cahill, 2004), while bisexual (Elia, 2010) and transgender (Greytak, Kosciw, & Boesen, 2013) students often feel invisible in a culture that still

insists members choose between one of two sexual orientation or gender alternatives, respectfully. Heterosexual allies are often afraid to attend GSA meetings for fear of being labeled LGBT by friends and others (Goldstein & Davis, 2010). High school GSAs do not operate in a vacuum. There are a number of factors that contribute to the relative success of individual GSAs (Griffin et al., 2004). The type of GSA on campus is one such factor. For the sake of simplicity, I have identified GSAs by number, rather than by name as the author did, since some of the names were quite long.

Counseling and support GSAs (GSA-1) are not school clubs, but rather are places where individuals or groups could meet with the GSA advisor, usually a school counselor (Griffin et al., 2004). The focus of this first level of GSA is on individual support; oftentimes, nonmembers are unaware that a GSA even exists (Griffin et al., 2004). GSAs of this type tend to develop in school settings with limited administrative and community support (Griffin et al., 2004). The next level, labeled safe space GSAs, incorporates friends as well as LGBT students.

The safe space GSA (GSA-2), unlike the GSA-1, is sometimes visible meaning that nonmembers know of its existence (Griffin et al., 2004). Instead of simply providing psychological support, as does the GSA-1, GSA-2s provide more social support to both LGBT students and their allies (Griffin et al., 2004). Sometimes, sometimes GSAs of this type attract more white, heterosexual girls than LGBT students (Griffin et al., 2004). Hence, some LGBT students, especially LGBT students of color, don't feel safe attending GSA meetings (Griffin et al., 2004). In Griffin's study, some GSA-2 advisors felt supported by the school administration, but others didn't (Griffin et al., 2004). Some

GSA-2s are invisible, like GSA-1s, while other GSA-2s are quite visible, some even marching in parades (Griffin et al., 2004). GSA-3s move beyond providing for safety and security, and into the realm of providing education to the general student body (Griffin et al., 2004)

GSA-3s are visible school clubs whose purpose is not to provide safety to GSA members, but to increase awareness of LGBT issues (Griffin et al., 2004). GSAs in this category sponsored a Gay Awareness Week, set up a LGBT book display in the library, and passed out pink triangles on National Coming Out Day (Griffin et al., 2004). The final category of GSAs move beyond teaching awareness and into making positive changes for LGBT students (Griffin et al., 2004).

In Griffin's study GSA-4s worked more closely with staff than GSA-3s (Griffin et al., 2004). For instance, one GSA-4 worked on staff development ideas proposed by the school principal (Griffin et al., 2004). Another GSA-4 helped create a LGBT section in the student handbook (Griffin et al., 2004). As one might imagine, some students would feel participation in some GSAs to be uncomfortable, even if they were out. For instance, shy students might be reluctant to pass out pink triangles. Unfortunately, I was not able to locate any study that identified what type of GSA was on campus.

Comparing GSA+ and GSA- Schools

High school GSA chapters have similar goals, namely improving the school climate for LGBT students and educating the student body about LGBT issues (GLSEN, 2007 as cited by Heck, Flentje, & Cochran, 2011). GSAs do improve the overall school climate for most LGBT students (Heck, Flentje, & Cochran, 2011). LGBT students that

are members of GSA chapters often benefit in ways that LGBT nonmembers do not (Heck, Flentje, & Cochran, 2011).

GSA Presence and LGBT School Victimization

Results from researchers investigating the association between the presence of a GSA on campus and LGBT school victimization generally find a negative association between having a GSA on campus LGBT victimization. A study involving 145 young adults between the ages of 18-20 found that students that had attended a GSA+ school reported significantly less at-school victimization because of their sexual orientation (Heck et al., 2013). The 2011 National School Climate Survey (GLSEN, 2012) also found that students attending GSA+ schools were significantly less likely to experience victimization due to sexual orientation or gender expression (GSA+, 23%; GSA-, 38.5%). Kosciw, Palmer, Kull, and Gretak (2013) found that having a GSA on campus was related to a decreased incidence of anti-LGBT victimization.

Poteat et al. (2013) failed to find a statistical significance between GSAs on campus and student victimization. One possible reason their study failed to find a significant association between having a GSA on campus and in-school LGBT victimization could be due to the relatively small number of schools ($N = 45$) being surveyed (Poteat et al., 2013). However, this study differs from the previous three studies in another important way. The first three studies (which all found a significant relationship between GSA presence and victimization) only surveyed LGBT youth; in this study, however, almost 95% of the surveyed students identified as heterosexual.

Heterosexual youth are presumably much less likely to feel victimized because of their sexual orientation.

The measure of victimization used in this study also only consisted of four questions, one of which specifically asked if a student had been bullied, threatened, or harassed for being perceived to be gay, lesbian, or bisexual. While some heterosexual students may be perceived to be LGBT, the vast majority of heterosexual students are probably not. Some researchers broke victimization down into component parts. Both sets of researchers included a measure involving homophobic slurs; the studies found that students at GSA- schools reported hearing more homophobic slurs than did students attending GSA+ schools (GLSEN, 2012; Toomey et al., 2011).

GSA Presence/Participation and Depression

Toomey et al. (2011) found that participation in a GSA was associated with lower levels of depression, as measured by the Center for Epidemiologic Studies Depression Scale (CES-D), but only at lower levels of victimization. At higher levels of victimization, however, participation in a GSA wasn't associated with lower depression scores (Toomey et al., 2011). Heck et al. (2013) found that GSA+ students had lower Beck's Depression Inventory-II scores, indicating lower levels of depressive symptoms

Walls et al. (2013) studied 284 sexual minority youth and young adults and found no significant relationship between membership in a GSA and depressed mood.

However, Walls et al. only asked one question regarding depression, "During the past twelve months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some of your activities" (Walls et al., 2013, p. 94).

The response set consisted only of yes or no response. While this question might be appropriate as a part of a screener for depression, it hardly is an accurate measure of depression in and of itself. Many people could be depressed and honestly answer “no” to this question.

GSA Presence and Substance Use

Researchers have supported the association between having a GSA on campus and lower levels of substance use. One study found that GSA+ college students had lower levels of alcohol consumption and dependence as measured by the Alcohol Use Disorders Identification Test (AUDIT), as well as lower total AUDIT scores (Heck et al., 2013). Poteat et al. (2013) found that GSA+ youth in Grades 7-12 had lower smoking and drinking levels, as well as less frequent sexual behavior while under the influence of alcohol, marijuana, or other drugs than did students from GSA- schools. Heck et al. 2013) found that students attending a GSA+ school had significant higher levels of school belonging than those attending a GSA- school.

Problems with the Studies

Participants used in studies referenced in this study were either recruited via convenience sampling or via the internet. While there are advantages to using each of the two recruitment methods, both methods also presented the researchers with results with limited generalizability. All of the studies referenced in this dissertation used measures that were self-report; therefore, inaccuracies could exist if participants chose not to complete the measures accurately. Another set of problems involves a lack of operationalized definitions of key variables. All GSAs, for instance, do not share the

same goals (Walls et al., 2013), and are not equally effective at attaining those goals (Watson et al., 2010).

Problems Involving Convenience Sampling

Several researchers mentioned study limitations related to convenience sampling. Rivers and Noret (2008) mentioned that the majority of the study participants were Caucasian. Bauermeister et al. (2010) used LGBT drop-in centers to recruit participants. Bauermeister et al. suggested that it was possible that youth participating in their study possessed better coping skills than LGBT youth in general since they were comfortable enough to visit a location attended by mostly LGBT youth.

Bauermeister et al. (2010) found that participants in their study lived in or near urban areas. Youth from rural areas were not represented. It is likely that urban youth have more access to LGBT-friendly resources and support than rural LGBT youth, and therefore are more likely to become involved in same sex relationships. Williams (2011) found that participants were mostly from a small town where residents tended to be poor and Catholic.

Problems Related to Internet Sampling

Ream and Savin-Williams (2005) mentioned study limitations related to Internet sampling. Ream and Savin-Williams examined associations between religiosity and LGBT youth mental health and noted that since it was impossible to tell how many people saw the study survey but chose not to respond, calculating the response rate was impossible. Ream and Savin-Williams also found that men were over-represented.

Differences in Overall School Climate

Although the presence of a GSA on a high school campus is associated with a more positive school experience for many LGBT students, other factors, for example, supportive teachers have been shown to provide important benefits as well. The 2011 National School Climate Survey by GLSEN addressed many of these factors in its Executive Summary (GLSEN, 2012). However, as the survey measured each factor individually, there was no profile comparing the life satisfaction of LGBT students attending a school with all of the component parts of a positive school climate.

Differences in Type of GSA Involved

Multiple ecological systems help determine how effective an individual GSA will be, and what primary purpose the GSA will serve (Watson et al., 2010). Watson et al. found that several levels of factors determined how effective an individual GSA chapter would be in advocating for LGBT youth. Individual factors are factors that are unique to the individual GSA advisor and his or her personal experiences with being LGBT, advocating for LGBT youth, or both (Watson et al., 2010).

School-based factors involve school personnel, policies, and access to school-based resources. Finally, sociocultural factors, including parents, cultural norms, public policy, and community resources play the most distant but possibly most important set of factors that determine GSA chapter effectiveness (Watson et al, 2010). An excellent GSA advisor employed in a gay-friendly school will still have significant problems advocating for LGBT youth if parents aren't supportive (Watson et al, 2010).

Griffin et al. (2004) found that an individual GSA can be classified in one of four ways, depending on the services provided. At the most basic level, a GSA can serve a counseling/support function. Gay-straight alliances in this category are often invisible; in fact, the GSA does not formally exist (Griffin et al., 2004). Oftentimes, a school counselor will simply make himself or herself available to LGBT students wishing to talk (Griffin et al., 2004). The main services provided by this type are psychological support and safety (Griffin et al., 2014).

A safe space type GSA focuses on providing a place for LGBT students and their friends to meet (Griffin et al., 2004). This type of GSA differs from the counseling/support type because it includes friends and allies of LGBT students as well, thereby adding a social element while continuing to provide individual support to LGBT students (Griffin et al., 2004). Safe space GSAs are sometimes visible, sometimes not (Griffin et al., 2004). While the previous two types of GSAs focused mostly on providing safety and support to LGBT students, the third type of GSA goes beyond that to include activities that involve providing education and awareness to the general student body (Griffin et al., 2004). This type of GSA is visible, and in addition to providing services to LGBT students, the education/awareness GSA also focuses on creating a more tolerant school climate (Griffin et al., 2004).

The fourth, and most public type of GSA exists in schools that have moved beyond educating the student body, and instead focus their efforts on working with agencies outside the school campus (Griffin et al., 2004).

LGBT High Schools

For the purpose of this study, a LGBT high school is a physical (not online) school that is authorized to grant high school diplomas to students completing the required coursework. Online schools are excluded from this study. Since comparisons are to be made between the mental health of students attending high schools with or without GSAs on campus, it is necessary to include only those LGBT high schools that offer an experience similar to students attending regular high schools. Schools that offer an independent studies program will also not be included in this study.

In 1984, “School A” became the first high school established for lesbian, gay, bisexual, and transgendered children (Mayes, 2006). The original school was operated and sponsored by the Hetrick-Martin Institute (HMI), an agency designed to provide a variety of services to LGBT youth (Mayes, 2006).

In June of 2002, a new school was authorized by the New York City Board of Education (Rivard, 2003). In 2008, the high school had 96 students enrolled in Grades 9-12. The new school is operated by the New York Department of Education, although HMI still manages the facility and offers after-school programs there. 65% of their budget is financed by public dollars, while the remaining 35% comes from private donors (Quittner, 2003).

While the overwhelming majority of New York City LGBT students choose to remain in their assigned high schools, for some of the most non-conforming students, this just is not an option. For instance of 60,000-100,000 gay youth in the New York community, only about 100 attend School A (Branigan, 2003).

In 2005 “School B” opened in the Midwest. School B is a small, teacher-led charter school (Pardini, 2013). When it first opened in 2005 it enrolled Grades 9-12. However, in 2009, School B expanded its program to include grades 6-12, making it the only gay-friendly school for 6th-8th graders. Due to budget cuts, the middle school program is being phased out, and in the 2014-2015 school-year, School B will once again only enroll high school students.

Proponents

LGBT high schools offer a place for children who have been constantly harassed and beaten in other schools (Trotta, 2003). Unlike other harassed students, many teachers and administrators don’t protect gay students, 28% of them drop out of major city school (Rivard, 2003). Programs are designed to keep kids in school. For instance, at School B classes meet just 4 days a week. They take four 100-minute classes each day (Pardini, 2013). New York City’s Mayor Bloomberg believed School A solves a discipline problem, presumably what he meant was that if the most nonconforming LGBT students were removed from regular schools, there would be less bullying, and therefore fewer suspensions (Trotta, 2003). However, to date, there have been no studies involving either of the two LGBT high schools.

Opponents

Some opponents of LGBT schools argue that schools for sexual minority students violate the *Brown v. Board of Education* court decision prohibiting separate-but-equal educational facilities (Mayes, 2006). In 2003, Senator Diaz Sr. sued the city of New York claiming School A discriminates against straight students (Branigan, 2003). Andy Milk,

Harvey Milk's nephew believed that his uncle would be ashamed that a school was established that [put] up a bar or a wall to separate LGBT and non-LGBT students (Branigan, 2003). Others say that it is the city's duty to ensure that every public school provides a safe and supportive learning environment. The city needs no nonsense teachers and principals that will punish the bullies, and remove them from the city's various high schools if necessary (Kirchick, 2003). If LGBT kids are sheltered in high school, they are eventually going to have to interact with straight people. Some conservative thinkers suggested that taxpayers should not help make sexuality a central part of a child's or a school's identity (Webley, 2011)

Justification for Selection of Variables or Concepts

Covariate variables that were selected for this study were biological sex, gender identity, gender expression, race, and sexual orientation. The birth sex of the participant (male, female) was selected as a covariate variable because studies have found that there are significant differences between the victimization experiences of LGBT males and LGBT females. There are also important differences between boys and girls. Girls are more likely to present with internalizing disorders (depression, social anxiety, and eating disorders), while boys are more likely to present with disruptive disorders (Herpertz-Dahlmann, Bühren, & Remschmidt, 2013).

Tezvaran, Akan, and Zahmacioglu (2012) found that girls are more likely to be anxious, and boys are more likely to be depressed. The sexual orientation (Kinsey scale) was selected as a covariate variable because a completely homosexual (Kinsey scale 6)

student is likely very different from a mostly heterosexual (Kinsey scale 1) student. Students that identify as nonsexual (Kinsey scale X) will not be included in this study.

Gender expression was chosen as a covariate variable for this study. Gay and bisexual men who are gender nonconforming tend to report more psychological distress (Skidmore et al., 2006) than more gender conforming men. This may be due to the fact that more feminine men are more likely to be perceived to be gay or bisexual and therefore likely to experience more stigmatization than more gender conforming men (Skidmore et al., 2006). More feminine men may also receive less social support, even from other LGBT individuals. Gender non-conforming men tend to have, on average, a lower socioeconomic status than more gender conforming men (Skidmore et al., 2006). There is no association between a lack of gender conformity and psychological distress for lesbian and bisexual women.

Gender identity was selected as a covariate variable because researchers have found that there are significant differences between school experiences for students whose gender identity matches (cisgender) or does not match (transgender) their biological sex. Transgenderism has been seen by some as an extreme example of gender nonconformity. Transgender students are the most at-risk for being victimized at school (Toomey et al., 2013). Sousa (2005, as cited by Toomey et al., 2013) found that 96% of transgender students reported being physically harassed at school, while 83% reported being verbally harassed.

Finally, race/ethnic identity was chosen as a covariate variable. Studies have found an association between race and levels of anxiety (Latzman et al., 2011) and levels

of victimization (Russell, Everett, Rosario, & Birkett, 2014). When compared to White children, African American and Latino youth who are physically abused are more likely to develop PTSD and anxiety symptoms (Balsam, Lehavot, Beadnell, & Circo, 2010). Racial minorities are also more likely to be the victims of childhood abuse than are Whites. Balsam et al. found that Latino and Asian youth are the most likely to be physically abuse, while Latino and African American children are the most likely to be sexual abused. African American children who are emotionally abused and Latino children who are physically abused are also more likely to develop PTSD and anxiety symptoms than White children who are emotionally or physically abused (Balsam et al., 2010).

The dependent variable for this study is mental health, comprised of individual measures for depression, anxiety, self-esteem, life satisfaction, and internalized homophobia. A measure of anxiety was chosen for this study because one would expect that LGBT students attending a LGBT high schools would be less anxious (due to less bullying) than LGBT students attending GSA+ and GSA- schools. A recent study found that victimized students were two to three times as likely to develop an anxiety disorder in adulthood than nonvictimized peers (Stapinski et al., 2014).

LGBT students attending a mainstream (GSA+ or GSA-) high school would also experience increases in anxiety if they were in the process of considering coming out to friends, since they would have no way of knowing what type of response they would receive. LGBT students who chose to frequent a place or event attended by mostly LGBT might be anxious that they'd be seen by someone from school who then might tell others.

LGBT students attending mainstream schools are less likely to have a support network in place, especially if the school is without a GSA on campus. However, even having a GSA on campus would be of little use to LGBT students that will not attend meetings because they are not yet out to friends. Having a support network has been shown to reduce levels of anxiety brought upon by being the victim of bullying.

A measure of self-esteem was also chosen for this study because closeted LGBT students attending mainstream schools would likely experience lower levels of self-esteem due to being aware that who they really are is at odds with the values of those with whom they associate and call friends. Since closeted LGBT students are also less likely to be in a SSR, they also would not benefit from the increases in self-esteem (boys) or decreases in internalized homophobia (girls) that comes about from being in a SSR.

Depression was chosen as a variable for several reasons. First, low self-esteem is associated with an increase in depression (S. Rieger, Göllner, Trautwein, & Roberts, 2015). LGBT young adults are more likely than their heterosexual counterparts to experience depression. Depression is also associated with coming out to parents and others if the adolescents feel that being LGBT is a burden on their families and other people in their lives (Baams, Grossman, & Russell, 2015). Increases in anxiety and depression also predicted increases in victimization as well (Turner, Reynolds, Lee, Subasic, & Bromhead, 2014).

A measure of life satisfaction was chosen for this study because some LGBT students may not be significantly depressed or anxious, but may also not feel that they are enjoying life as much as heterosexual peers. Gender conforming LGBT students, for

instance, might be readily accepted by their peers, but would not be able to date someone of their same sex.

Internalized homophobia was chosen as a variable for this study. A recent study suggests that distal stressors such as financial difficulties and violence predicted internalized homophobia in a sample of African American men who have sex with men (Wong, Schrager, Holloway, Meyer, & Kipke, 2014). Distal stressors and internalized homophobia both predicted depressive symptoms in this sample as well (Wong et al., 2014). A second study involving 1,099 young sexual minority women suggests that internalized homophobia is associated with maladaptive coping which in turn is associated with psychological distress (Kaysen et al., 2014).

Major Themes in the Literature

While many students are bullied in high school LGBT students, unlike many other bullied children, often have no one to turn to for support. Herek's neofunctional approach has demonstrated that those that bully do so because they receive some form of psychological or social benefit from doing so. However, LGBT students who often face the brunt of bullying suffer not only because they are bullied, but because they have few, if any, people they can go to for support. In the late 1980s, schools in Boston and Los Angeles began offering LGBT students support in the form of GSAs. Now there are over 4,000 U.S. schools with GSA chapters on their campuses.

The 2011 National School Climate Survey by GLSEN found that a positive school climate requires more than just a GSA chapter on campus. Supportive educators, comprehensive bullying/harassment policies, and curriculum that include LGBT content

also are needed in order for a LGBT student to not only feel safe, but also accepted and welcome. School A in the Northeast and School B in Midwest are the only two public high schools in the United States that enroll predominately LGBT students. A search of the literature failed to find any studies involving LGBT students attending these schools.

Summary

Bullying is a serious problem in U.S. high schools (Kalman, 2013). Unlike many other minority students, LGBT students who are bullied often have few people to turn to for support (Kosciw, Palmer, Kull, & Greytak, 2013). This is especially true for LGBT students who are perceived by peers to be gender nonconforming (G Rieger & Savin-Williams, 2012).

Students who are bullied are at increased risk for developing mental health problems (Luk et al., 2010), are more likely to use alcohol and illicit drugs (Gower & Borowsky, 2013), and are more likely to engage in risky sexual behavior (S. T. Russell, Everett, et al., 2014).

Herek's neofunctional theory suggests that those who bully others are motivated by internal needs, such as the need to be accepted by a peer group (Herek, 1986). For some bullies the need to be accepted is more important than the desire to avoid punishment (Kalman, 2013).

Herek's sexual stigma theory details how heterosexism hurts all students, namely by forcing students to conform to rigorous gender roles (Herek et al., 2015). LGBT students who are open about their sexual orientation face harassment and are more likely

to skip class (Frost & Bastone, 2008), while closeted LGBT students suffer from lower self-esteem (Lönnqvist et al., 2009).

GLSEN has identified several factors that contribute to a positive school climate (GLSEN, 2012). LGBT students who attend a high school with a GSA on campus are less likely to be depressed, and are less likely to drink alcohol or use drugs (Heck et al., 2013). However, there are many differences between individual GSA chapters, and some are more effective than others in advocating for the rights of LGBT students (Griffin et al., 2004). Furthermore, other factors such as attending a school with a comprehensive antibullying policy are also important for creating a positive school climate (GLSEN, 2012).

Currently there are two LGBT high schools in the United States. Students can choose to attend these schools instead of the high school in their attendance areas. Several of the students attending LGBT high schools report that they would have dropped out of high school if these schools had not be available (Branigan, 2003; Pardini, 2013).

Chapter 3: Research Method

Introduction

The purpose of this study was to determine if LGBT students attending an LGBT high school have better mental health compared with LGBT peers attending mainstream high schools with (GSA+) or without (GSA-) gay-straight alliances. Previous researchers have found that LGBT students that attend GSA+ high schools experience less in-school bullying and score better on various mental health assessments than LGBT peers attending GSA- high schools (Murphy, 2012). It was hypothesized that students attending a LGBT high school will have lower levels of anxiety and depression, lower levels of internalized homophobia, and higher levels of self-esteem and life satisfaction.

Research Design and Rationale

The independent variable for this study is school type: LGBT high school, GSA+, and GSA-. The dependent variables are anxiety, depression, internalized homophobia, life satisfaction, and self-esteem. The covariate variables for this study included biological sex at birth, race, sexual orientation, gender identity, and level of gender conformity.

I compared the levels of depression, anxiety, internalized homophobia, life satisfaction, and self-esteem of recent graduates of LGBT high schools with recent graduates of GSA+ and GSA- high schools. Since participants in this study were not randomly chosen, but rather chose to participate after learning of the study, this study is classified as quasi-experimental. Participants were recruited for this study via convenience sampling (participants who chose to participate after seeing printed

advertisements or an internet site) and snowball sampling (participants who are referred to the study by others who had previously heard of the study).

Participants in this study responded to a set of demographic questions, and then complete five short mental health assessments. This study is a quantitative study interested in comparing obtained scores of LGBT high school graduates with scores obtained from GSA+ and GSA- high school graduates. Each participant provided data only once. Researchers who collect data in this manner are said to use a cross-sectional design since the same data are collected from different sections (e.g. school types). Benefits of cross-sectional designs include being relatively inexpensive and easy to administer via surveys. Cross-sectional designs are also time limited. A cross-sectional design allows a researcher to obtain a sampling of LGBT participants who formally attended each of the three school types (Creswell, 2008).

Other types of research designs would not be practical for this study. A qualitative study, for instance, would be impractical since the study author lives a considerable distance from potential participants, making it difficult to interview or observe participants. Because this study involves former students and not current students, participants would not be located in any one area, for instance a school playground.

Qualitative studies usually require a greater amount of time to be invested in each participant (Creswell, 2008). Fewer participants are usually chosen for qualitative studies than for quantitative studies. This particular study requires in excess of 100 participants in order to achieve statistical significance. A qualitative study involving over 100

participants would require more time than is necessary to answer the research question using a quantitative method.

Tests involving pre- and post-test formats would also be unable to answer the research questions. This study is a comparison of scores between groups of recent graduates who attended one of three school types. This study did not involve an intervention. The scores obtained at two time points would be unlikely to differ significantly from one another.

Various researchers comparing schools with and without GSAs have used a cross-sectional research design. A 2012 study involving 45 schools (14 GSA+ and 31 GSA-) and more than 17,000 students found that students attending a GSA+ high school reported lower suicidal ideation than students attending GSA- high schools (Poteat et al., 2013a). Another study of 245 LGBT young adults ages 21-25 by Toomey et al. (2011) found that those who had attended a GSA+ school had higher levels of well-being (as measured by the CES-D and the RSE) and more college attainment than those who had attended a GSA- high school.

Two studies involving GSAs used qualitative approach. Lee (2001) interviewed seven student GSA members over a 2-year period. While Lee suggested that attending a school with a GSA does, in fact, contribute to positive school climate (e.g. more comfortable being LGBT), Lee was unable to provide measurable data, and rather relies on the opinions of the participants.

Griffen, Lee, Waugh, and Beyer (2004) described different roles that GSAs play in high schools. Staff and administrators from 22 high schools were interviewed. Based

on those interviews, four different types of GSAs were proposed to exist. Since the target schools for my proposed study are located quite far away from me (and from each other) it would be very difficult to conduct a study that relied on interviews or other qualitative methods.

Methodology

The target population for this study was former LGBT public high school students who attended a brick-and-mortar campus. It was estimated that the two LGBT high schools that were used in this study currently enroll a combined total of approximately 250 students, although it was difficult to know how many former LGBT high school students will choose to participate in this study.

I employed a convenience sampling strategy. Flyers were sent to LGBT community centers near local high schools. The flyer encouraged readers to pass the study details to other former students meeting the inclusion criteria. It was hoped that a snowball effect would net not only a larger number of participants, but also would include former students residing in other states.

High school graduates of brick-and-mortar high schools who self-identify as LGBT met the inclusion criteria for this study. Individuals who are not at least 18 years old were excluded from this study, as are individuals who did not graduate from a brick-and-mortar high school (e.g. independent study or an online high school). Individuals who self-identify as heterosexual (or asexual) were excluded from this study.

Cohen (year) stated that 0.25 is considered to be a medium effect size for multiple and multiple partial correlations. A medium effect is an effect that is likely to be observed

with the naked eye by a careful observer (Cohen, 1992). A power level of 0.80 has been established as a minimum acceptable level for social sciences (Cohen, 1992). A sample size of 269 would be needed for a standard error of 0.05, a power level of 0.80, and three groups.

In order to reach a large audience, three different recruitment methods will be used. First, flyers containing information about the study were posted in or around LGBT centers near the two target high schools. The flyer provided brief description of the study, and direct potential participants to a Facebook page for more detailed information and access to the actual study. The Facebook page began with a paragraph explaining informed consent, namely that participation in this study is voluntary and participation may be terminated at any time without penalty.

Additionally, I used the Walden participant pool to reach potential participants within the United States. I also posted the study to two groups on an internet site.

While it is unlikely that a participant completing the proposed study survey would have been emotionally harmed as a result of completing the study, a list of counseling centers was provided if a participant wished to speak with a mental health professional. The participants were provided with my e-mail address in the event that he or she wished to discuss the study further.

Participants were asked to provide responses that identify their sexual orientation (Kinsey scale format), gender identity, level of gender conformity, race, biological sex, and type of school they attended in high school. Next, participants completed five short

mental health assessments (82 questions total). It took pilot participants between 5-15 minutes to complete the survey on paper.

Instrumentation and Operation of Constructs

Because this survey was conducted online, most of the instruments chosen for this survey were both free and in the public domain. The STAI required a fee to be paid for every 50 administrations. Since students completing this survey were not supervised, every effort was made to make the total survey as short as possible while still selecting instruments that are both sufficiently valid and reliable. The initial section of the survey asked the participant to complete demographic information (see Appendix A). The following information was requested.

Birth Sex

Birth sex was limited to male or female. While there are other categories, for instance, intersex, this study was limited to those who report being born either male or female.

Gender Identity

Gender identity refers to the sex that a person most identifies. A person can identify as a male, a female, or a mixture of both. For the purpose of this study, a biological male that identifies as a biological female was referred to as Male-to-Female (MTF) or third sex, and a biological female that identifies as a male was identified as Female-to-Male (FTM), or fourth sex. A person who does not identify with any of the above was classified as gender queer/other gender identity. Gender identity was coded in SPSS as cisgender (when birth sex and gender identity have the same value), transgender

(when birth sex and gender identity have different values), or gender queer if the participant did not identify with only sex.

Sexual Orientation

Sexual orientation refers to which sex or sexes a person finds himself or herself attracted. For the purpose of this study, a Kinsey scale format will be used. A Kinsey scale score of 0 indicates *completely heterosexual*; a score of 1 indicates *predominately heterosexual*; a score of 2 indicates *more heterosexual than homosexual*. A score of 3 indicates *equally heterosexual and homosexual*, while a score of 4 indicates *more homosexual than heterosexual*. A score of 5 indicates *predominately homosexual*; a score of 6 indicates *completely homosexual*. Since this study is limited to LGBT high school graduates, data from participants who self-identify as completely heterosexual were discarded.

Gender Expression

Gender expression refers to what degree a person's behaviors match or do not match his or her birth sex prototypical behaviors. Unlike sexual orientation, gender expression is often visible to others. Participants were asked to state whether they are mostly gender conforming, mostly gender nonconforming, or equally conforming and nonconforming. If a participant was unsure, they may have referenced the Gender Identity Scale (Patterson, 2012a), consisting of 10 questions related to gender conformity.

Race

Participants chose to identify as White/Caucasian, Black/African American, Hispanic/Latino, Asian/Pacific Islander, or Mixed/other. When entered into SPSS, race

will be coded as either White or Non-White. The participant completed five measures of mental health, including measures of anxiety, depression, internalized homophobia, self-esteem, and life satisfaction. These measures are listed below.

Anxiety

For the purposes of this study, anxiety is defined as “a mood state characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune” (VanderBos, 2007, p. 63). The Spielberger’s State-Trait Anxiety Inventory (STAI), form Y, is a 40 item test used to diagnose anxiety, and to distinguish anxiety from depression (Appendix B; Spielberger, Gorsuch, Vagg, & Jacobs, 1983). Twenty questions evaluate state anxiety, for example, I am tense; while the second set of 20 questions evaluate trait anxiety, for example, I worry too much over something that really doesn’t matter (C. D. Spielberger et al., 1983). The STAI uses a 4-point Likert scale: 1-*almost never*, 2-*sometimes*, 3-*often*, and 4-*almost always*. Total scores range from a low of 40 to a high of 160.

For the purpose of this study, both the state and trait anxiety scores were used. The scores were added together for a total anxiety score.

Internal consistency for the STAI has ranged from .86-.95; test-retest coefficients from .65-.75 over a 2 month period (C. D. Spielberger et al., 1983). According to Spielberger (1989), the STAI has both construct and concurrent validity. A meta-analysis of 816 articles located in both MedLine and PsycINFO databases found that subjects in lower stress environments had a mean state anxiety score of 36.56 (compared with 47.62 for higher-stress environments), while trait anxiety scores varied less (45.10 higher stress

versus 39.19 lower stress; Barnes, Harp, & Jung, 2002). Balsame et al. (2013) found that the STAI-T (20 questions making up the trait anxiety scale) measured negative affect (elements common to both anxiety and depression) rather than anxiety alone.

Depression

For the purposes of this study, depression is defined as “dysphoria that can vary in severity from a fluctuation in normal mood to an extreme feeling of sadness, pessimism, and despondency” (VanderBos, 2007, p. 269). The Center for Epidemiologic Studies Depression Scale Revised (CESD-R) is a 20-item self-report instrument measuring nine components of depression as identified by the DSM-V (Appendix C; Center for Epidemiologic Studies, 2015). The test uses a 4-item Likert scale: 0 indicating the symptom was *not present at all or present for less than one day in the previous two-week period though*; 4, indicating the symptom was *present nearly every day for the past two weeks* (Center for Epidemiologic Studies, 2015).

The CESD-R is scored by summing the scores, with the range being between “0” and “80”. The CESD-R can make the following diagnostic suggestions: Major Depressive Episode (MDE), possible MDE, or subthreshold depressive symptoms (Center for Epidemiologic Studies, 2015). Van Dam and Earleywine (2011) found that the CESD-R had good internal consistency (Cronbach’s $\alpha=0.928$), as well as convergent (large positive correlation between CESD-R and State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA), $r=.0737$, $p<.01$). When controlling for CESD-R, there was no relation between positive affect and STICSA ($\beta=-.0041$, $t=-.74$, $p=.046$, suggesting that the included covariance of depression removed significant relations between positive

affect and anxiety (Van Dam & Earleywine, 2011). Van Dam and Earleywine stated that the CESD-R measures both negative mood and functional impairment.

Internalized Homophobia

For the purposes of this study, internalized homophobia is defined as “a sexual minority individual’s personal acceptance of sexual stigma as a part of his or her own value system” (Herek, Gillis, & Cogan, 2009, p. 33). The Internalized Homophobia Scale (IHP) designed in 1987 by Martin and Dean, consists of nine items that relate to the extent to which men are “uneasy with their homosexuality and seek to avoid homosexual feelings” (Meyer, 1995, p. 43; Appendix D). Alpha level is 0.79, and positively skewed, indicating most men (in the norm sample) had low scores of internalized homophobia (Meyer, 1995). The IHP is comprised of four factors: public identification as gay, perception of stigma associated with being gay; social comfort with gay men, and moral and religious acceptability of being gay (Ross & Rosser, 1996). Internal reliability ranges from a low of .62 to a high of .85 (Ross & Rosser, 1996). The construct of internalized homophobia has both internal reliability and concurrent validity (Ross & Rosser, 1996). The IHP was derived from diagnostic criteria for ego-dystonic homosexuality as defined by the DSM III (Herek et al., 1997)

The Revised Internalized Homophobia Scale (IHP-R) consists of five statements which are answered using a 5-point Likert scale. One item reads, “I wish I weren’t lesbian bisexual [gay/bisexual].” Scores on the IHP-R range from 5-25; higher scores indicating more internalized homophobia. Gay men average 7.7 on the IHP-R, lesbians 6.25, bisexual men 10.85, and bisexual women 7.3 (Herek et al., 2015a).

Self-Esteem

For the purposes of this study, self-esteem is defined as “the degree to which the qualities and characteristics contained in one’s self-concept are perceived to be positive” (VanderBos, 2007, p. 830). The Rosenberg Self-Esteem Scale (RSE) was developed in 1965 by Rosenberg (Rosenberg, 1979). The RSE consists of 10 statements which are responded to using a 4-point Likert scale (Appendix E; Rosenberg, 1979). One item reads, “On the whole, I am satisfied with my life.” Scores range in value from 10-40, with higher scores indicating better self-esteem (Rosenberg, 1979).

A study conducted in 2003 collected RSE data from 53 nations (Schmitt & Allik, 2005). Participants were mostly college students. Data collected from U.S. participants ($N=2,782$) had a mean score of 32.21, with a standard deviation of 5.01 (Schmitt & Allik, 2005). Students from Japan had the lowest RSE mean score (25.50), while students from Serbia had the highest mean score (33.59).

The RSE demonstrates excellent internal consistency (Guttman scale coefficient of reproducibility of .92), and test-retest correlations of between .85-.88, indicating excellent stability (Rosenberg, 1979). The RSE correlates significantly with the Cooper Self-Esteem Inventory (0.55, $p<.001$) and moderately significantly with peer ratings (0.32, $p<.05$; Demo, 1985)

Life Satisfaction

For the purposes of this study, life satisfaction is defined as the extent to which a person’s life matches with his or her ideal life. The five-item Satisfaction with Life Scale (SWLS) was developed in 1985 by Diener (Appendix F; Pavot & Diener, 1993). The

SWLS uses a seven-point Likert scale, 7 *being strongly agree*, 1 *being strongly disagree* (Diener, 2006). The total score is determined by adding the responses to all five statements (Diener, 2006). A total score from 31-35 indicates extremely satisfied, 26-30 satisfied, 21-25 slightly satisfied, 20 neutral, 15-19 slightly dissatisfied, 10-14 dissatisfied, and 5-9 extremely dissatisfied.

A study conducted in 1993 demonstrated that the SWLS has good internal consistency (.79-.89). Test-retest reliability at 2 weeks was good (.83), but by 10 weeks the test-retest reliability dropped to .50 (Pavot & Diener, 1993). This demonstrates that circumstances in an individual's life impact scores on the SWLS. The factor structure of the SWLS indicates that the SWLS measures a single dimension. Factor loadings for the five items range from a low of 4.25 to a high of 5.23. A number of studies have demonstrated that the SWLS is significantly correlated with other measures (Pavot & Diener, 1993). It is negatively correlated with the Beck Depression Inventory ($r = -.72$, $p = .001$; Pavot & Diener, 1993). The SWLS and the Positive and Negative Affect Schedule (PANAS) are also significantly correlated: .44 for positive affect and -.48 for negative affect (Pavot & Diener, 1993).

Data Analysis Plan

Data from this survey were analyzed using IBM's Statistical Package for the Social Sciences (SPSS), version 21.

Research Questions and Hypotheses

RQ1. When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school

have lower levels of anxiety (as measured by the STAI) and lower levels of depression (as measured by CESD-R) than recent LGBT graduates of GSA+ and GSA- high schools?

H1₀: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, recent graduates of LGBT high schools will be no more anxious or depressed than recent LGBT graduates of GSA+ or GSA- high schools.

H1_A: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, recent graduates of LGBT high schools will be less anxious and less depressed than recent LGBT graduates of GSA+ high schools, who in turn will be less anxious and depressed than recent LGBT graduates of GSA- high schools.

In order to test this hypothesis, I checked for normal distribution. Since biological sex and race are likely influence anxiety and depression scores, both biological sex and race will be entered as factors before tests of normalcy are run. Next, I confirmed that there is a reasonable correlation between the dependent variable depression, and the covariate variables (Analyze, Correlate, Bivariate). Covariate variables that were not found to be reasonably correlated (significant level of .05 or less, Pearson two-tailed) with the dependent variable (depression) were not included. Next, using the covariates selected in the previous step, I ran a one-way analysis of variance (ANOVA), with school type as the factor and the covariates as dependent variables.

I examined the main effect between sex/race and anxiety (and depression). This was accomplished by running an analysis of covariance (ANCOVA) in SPSS (Analyze, GLM, Univariate). Anxiety (Depression) were the dependent variable; race/sex was the

fixed factor. The results were examined to determine if either race or sex was significantly associated with depression scores. Finally, the covariates were added (one at a time) to determine if they reduce the standard error. If the standard error was reduced (from the previous step), then the covariate(s) were retained.

Finally, I ran an ANCOVA with school type as the fixed factor and anxiety (Depression) as the dependent variable. Retained covariates (that were found to explain some of the standard error) were entered as covariates. If there was a significant difference between anxiety (depression) scores between the three school types, then anxiety (depression) was retained for the final step.

RQ2. When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school have higher levels of self-esteem as measured by the Rosenberg Self-Esteem Scale than recent LGBT graduates of GSA+ and GSA- high schools?

H2₀: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the levels of self-esteem of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ or GSA- high schools.

H2_A: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be a significant difference in the levels of self-esteem of recent graduates of LGBT high schools compared with LGBT students attending GSA+

high schools. Recent graduates of GSA+ high schools will have higher levels of self-esteem than recent LGBT graduates of GSA- high schools.

In order to test this hypothesis, I used the same procedure as was used to test for anxiety and depression. First, I determined which (if any) covariates explain some of the standard error in self-esteem among the three school types. Next, I ran an ANCOVA with school type as the fixed factor and anxiety (Depression) as the dependent variable. Covariates that were found to explain some of the standard error were entered as covariates. If there was a significant difference between self-esteem among school types, then self-esteem was retained as a dependent variable for the final step.

RQ3. When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school have lower levels of internalized homophobia as measured by the Revised Internalized Homophobia Scale than recent LGBT graduates of GSA+ and GSA- high schools?

H3₀: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the levels of internalized homophobia of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ and GSA- high schools.

H3_A: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be significantly lower levels of internalized homophobia of recent graduates of LGBT high schools compared with recent LGBT graduates of

GSA+ high schools. Recent LGBT graduates of GSA+ high schools will have lower levels of internalized homophobia than recent graduates of GSA- high schools.

In order to test this hypothesis, I determined which (if any) covariates explained some of the standard error in internalized homophobia among the three school types. Next I ran an ANCOVA with school type as the fixed factor, internalized homophobia as the dependent variable. Covariates that explained some of the standard error were entered as covariates. If there is a significant difference between internalized homophobia scores between school types, then internalized homophobia was retained as a dependent variable for the final step.

RQ4. When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, do recent graduates of an LGBT high school have higher levels of life satisfaction as measured by the Satisfaction With Life Scale than recent LGBT graduates of GSA+ and GSA- high schools?

H4₀: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be no significant difference in the levels of life satisfaction of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ or GSA- high schools.

H4_A: When controlling for sex, race, sexual orientation, gender identity, and level of gender-conformity, there will be a significant positive difference in the levels of life satisfaction of recent graduates of LGBT high schools compared with recent LGBT graduates of GSA+ high schools. Recent LGBT graduates of GSA+ high schools will

have significantly higher levels of life satisfaction than recent LGBT graduates of GSA-high schools.

In order to test this hypothesis, I determined which (if any) covariates explained some of the standard error in life satisfaction among the three school types. Next I ran an ANCOVA with school type as the fixed factor and life satisfaction as the dependent variable. Covariates that explained some of the standard error were entered as covariates. If there was a significant difference between life satisfaction among school types, then life satisfaction was retained as a dependent variable for the final step.

Threats to Validity

Internal Validity

As participants for this study have not been randomly assigned to groups (as they would in an experiment), there was a chance that the groups are unequal. There could have been differences in students who voluntarily choose to attend a LGBT high school instead of attending a mainstream high school in their attendance area. It is possible that students attending an LGBT high school had better mental health outcomes which are explained in part by factors unrelated to attending an LGBT high school. Students who identify as gay or lesbian have better mental health outcomes than students who identify as bisexual or questioning (Elia, 2010). It is possible that a LGBT high school has more students who identify as completely or predominately homosexual. In order to address this possible threat to internal validity, my study matched former LGBT high school students with former mainstream high school students of similar sexual orientation, gender identity, and gender expression. The two LGBT high schools used in this study

have a greater proportion of racial minorities and/or female students (Kirchick, 2003; Pardini, 2013). Some studies have found differences in mental health outcomes for non-White and/or female students (Johnson, 2007). For this reason, former LGBT high school students will be matched with former mainstream high school students of similar race (White/non-White) and biological sex.

Another possible threat to internal validity involves maturation. In this study, maturation could have taken place if participants were asked to complete lengthy surveys. For this reason, I selected brief survey instruments in the hopes that the entire survey could be completed in less than 10 minutes. It is possible that former students of LGBT high schools will have wanted to paint their alma maters in a positive light. Some former students may report better mental health outcomes than are actually the case. While there is no way to ascertain if the reported level of mental health is accurate, if the data contain more than the acceptable number of outliers, the data will be logarithmically transformed.

External Validity

It is also possible that those who chose to participate in this study were not truly representative of the population. Every attempt was made to reach as many former students as possible. Participants for this study were initially recruited via posters or advertisements placed in various locations near the two target schools. Convenience sampling is a type of nonprobability sampling that may not accurately represent the population. The posters also asked readers to pass on the study information to friends that meet the inclusion criteria. Snowball sampling is also a form of nonprobability sampling. The survey was available via Facebook, so that it was easily accessed. Mainstream high

school graduates were recruited via snowball sampling or Reddit, an internet site frequented by young adults.

Since this was an online survey completed confidentially, there was no way to verify that the participants were actually members of the target population. The posters and the Facebook page stressed the importance of completing the survey only if they met the inclusion criteria. Before accessing the survey, participants acknowledged that read the informed consent information, and were voluntarily choosing to participate in the survey. They also acknowledged that they may stop the survey at any time if they chose to do so.

Ethical Procedures

Prior to collecting data for this study, appropriate Institutional Review Board (IRB) approval was received. Once IRB approval was received, data collection began. The IRB approval number is 11-18-15-0349647.

Participants for this study were high school students or graduates (at least 18 years of age) from LGBT and mainstream high schools who voluntarily agreed to complete an online survey administered via a Facebook page. Since all participants were at least 18 years of age, parental permission was not required. Prior to accessing the survey, participants acknowledged that they were voluntarily completing the survey, and could discontinue the survey at any time without penalty if they chose to do so. After completing (or discontinuing) the survey, participants were provided with a list of counseling centers that they could contact if they wished to discuss feelings or emotions

brought about as a result of participating in this study. No payment was offered for participation in this study.

Summary

The purpose of this study was to determine if recent graduates of LGBT high schools had better mental health than recent graduates of mainstream high schools. This was accomplished by comparing similar graduates from each of three school types: LGBT high schools, GSA+ high schools and GSA- high schools.

I hypothesized that recent graduates of LGBT high schools would have lower levels of anxiety and depression, lower internalized homophobia, and greater levels of self-esteem and life satisfaction when compared with recent graduates of mainstream high schools. In order to test these hypotheses, I ran separate ANCOVAS for each dependent variable. A sample size of 111 was required for this study using an alpha of .05, power of .80, and an effect size of .40.

There were several threats to both internal and external validity. First, if graduates of a LGBT high school had better mental health it may not be only because they attended a LGBT high school. There is no way to verify that those participating in the survey met the inclusion criteria. This study required a sample size of 111 which is likely not a large enough sample to generalize the findings to the population they represent. Informed consent was required before participants participate in the survey.

Chapter 4: Results

Introduction

This chapter is a presentation of the results of this quantitative study in which I explored the relationship between young adult mental health and the type of high school attended. This chapter will include a description of the participants, how the data were collected and analyzed, and how the data were used to answer the four research questions.

Research Questions

RQ1: When controlling for sex, race, sexual orientation, and level of gender-conformity, do recent graduates of an LGBTQ high school have lower levels of anxiety (as measured by the STAI) and lower levels of depression (as measured by CESD-R) than recent LGBTQ graduates of GSA+ and GSA- high schools?

H_{01} : When controlling for sex, race, sexual orientation, and level of gender-conformity, recent graduates of LGBTQ high schools will be no more anxious or depressed than recent LGBTQ graduates of GSA+ or GSA- high schools.

H_{a1} : When matched for sex, race, sexual orientation, and level of gender-conformity, recent graduates of LGBTQ high schools will be less anxious and less depressed than recent LGBTQ graduates of GSA+ high schools, who in turn will be less anxious and depressed than recent LGBTQ graduates of GSA- high schools.

RQ2: When controlling for sex, race, sexual orientation, and level of gender-conformity, do recent graduates of an LGBTQ high school respectively

recall having higher levels of self-esteem as measured by the Rosenberg Self-Esteem Scale than recent LGBTQ graduates of mainstream high schools?

H_02 : When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be no significant difference in the respective recalled levels of self-esteem of recent graduates of LGBTQ high schools compared with LGBTQ students attending mainstream high schools.

H_a2 : When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be a significant difference in the respectively recalled levels of self-esteem of recent graduates of LGBTQ high schools compared with LGBTQ students attending mainstream high schools.

RQ3: When controlling for sex, race, sexual orientation, and level of gender-conformity, do recent graduates of an LGBTQ high school have lower levels of internalized homophobia as measured by the Revised Internalized Homophobia Scale than recent LGBTQ graduates of GSA+ and GSA- high schools?

H_03 : When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be no significant difference in the levels of internalized homophobia of recent graduates of LGBTQ high schools compared with recent LGBTQ graduates of GSA+ and GSA- high schools.

H_a3 : When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be significantly lower levels of internalized homophobia of recent

graduates of LGBTQ high schools compared with recent LGBTQ graduates of GSA+ high schools. Recent LGBTQ graduates of GSA+ high schools will have lower levels of internalized homophobia than recent graduates of GSA- high schools.

RQ4: When controlling for sex, race, sexual orientation, and level of gender-conformity, do recent graduates of an LGBTQ high school have higher levels of life satisfaction as measured by the Satisfaction With Life Scale than recent LGBTQ graduates of GSA+ and GSA- high schools?

H₀4: When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be no significant difference in the levels of life satisfaction of recent graduates of LGBTQ high schools compared with recent LGBTQ graduates of GSA+ or GSA- high schools.

H_a4: When controlling for sex, race, sexual orientation, and level of gender-conformity, there will be a significant positive difference in the levels of life satisfaction of recent graduates of LGBTQ high schools compared with recent LGBTQ graduates of GSA+ high schools. Recent LGBTQ graduates of GSA+ high schools will have significantly higher levels of life satisfaction than recent LGBTQ graduates of GSA- high schools.

Data Collection

Participants for this study were recruited using a number of different approaches. First, I sent flyers to community centers near the two target LGBT high schools. The flyers gave a short description of the study and provided potential participants with the Facebook page that provided additional information as well as the link to the study's

survey. I also located two alumni (one from each of the two target high schools) on Facebook. The alumni were asked to participate in the study and to forward the study to others who had graduated from their high schools within the last 5 years. Unfortunately, no one who had attended an LGBT high school participated.

After 1 month only 15 respondents had completed the survey. I next contacted a former student who agreed to put the survey on a LGBT subreddit site. After 2 months, over 200 people had completed the survey. However, the respondents were mostly white gender conforming males. In an effort to boost the number of female and gender minority (transgender, gender fluid) respondents I posted the survey on a transgender subreddit site. Within 2 weeks, close to 20 female and/or transgender people had responded.

By the conclusion of the survey, 477 people had responded. Two hundred seventy-six people (60%) responded with completed surveys. Data from surveys that were not complete were discarded and not used in this study. Of the 278 completed responses, 183 were from people currently residing in the United States, and 95 were from out-of-country participants.

Before analyzing the data, four groups were created based on type of school attended (GSA+ or GSA-) and the respondents' location (U.S. or non U.S.). Table 1 displays the demographic data.

Demographic Data

Table 1

Demographic Characteristics

Characteristic	n	%
School type/Location		
GSA + (U.S.)	91	32.7
GSA- (U.S.)	92	33.1
GSA+ (Non U.S.)	18	6.5
GSA- (Non U.S.)	77	22.7
Sex		
Male	245	88.1
Female	33	11.9
Gender		
Male	221	79.5
Female	28	9.4
Male-to-Female	7	2.5
Female-to-Male	7	2.5
Gender Queer/Other	17	6.1
Gender Conformity		
Gender Conforming	202	72.7
Gender Nonconforming	25	9.0
Neither	51	18.3
Sexual Orientation		
Exclusively Homosexual	16	5.8
Predominately Heterosexual	13	4.7
More Heterosexual than Homosexual	24	8.6
Equally Heterosexual and Homosexual	45	16.2
More Homosexual than Heterosexual	30	10.8
Predominately Homosexual	67	24.1
Exclusively Homosexual	83	29.9
Race/Ethnicity*		
White, Non-Hispanic	231	85.8
Non-White and/or Hispanic	26	16.9
Location		
U.S. West	50	17.99
U.S. Midwest	39	14.03
U.S. South	52	18.71
U.S. Northeast	49	15.11
Europe	46	16.55
Asia	2	1.00
North American (Non U.S.)	30	10.8
South America	3	1.08
Australia	9	3.25

Note: *Due to the small percentage of non-White and/or Hispanic/Latino participants, only these two categories were used.

Participants in this study were predominately White, gender conforming males. Caution should be used when generalizing the results of this study to females, racial minorities, or gender variant individuals. There were limited data from Asia, South America, and Australia, and there were no data from Africa.

Preliminary Data Analyses

Table 2 displays the means and standard deviations for the six dependent variables by type X source group. The non U.S. GSA+ sample had the highest levels of self-esteem and life satisfaction and the lowest levels of state and trait anxiety, depression, and internalized homophobia. Graduates of U.S. GSA- high schools had the lowest levels of self-esteem and life satisfaction and the highest levels of state and trait anxiety, depression, and internalized homophobia.

Table 2

Means and Standard Deviations of Dependent Variables by Type X Source Group

Type x Source		State Anxiety	Trait Anxiety	Self-Esteem	Life Satisfaction	Depression	Internalized Homophobia
GSA+/U.S.	Mean	45.75	48.88	17.01	20.93	22.10	1.887
	<i>N</i>	91	91	91	91	91	87
	<i>S.D.</i>	13.036	12.495	6.871	8.170	14.253	.8357
GSA-/U.S.	Mean	49.43	52.83	14.91	18.29	25.41	2.065
	<i>N</i>	92	92	92	92	92	83
	<i>S.D.</i>	14.039	13.053	6.926	8.274	16.480	1.0597
GSA+/Non U.S.	Mean	44.44	47.28	17.56	22.78	16.22	1.722
	<i>N</i>	18	18	18	18	18	18
	<i>S.D.</i>	14.597	13.350	6.679	7.337	13.171	.5745
GSA-/Non U.S.	Mean	47.08	50.10	15.77	18.95	23.14	2.036
	<i>N</i>	77	77	77	77	77	73
	<i>S.D.</i>	14.929	14.243	6.331	7.513	14.884	1.0798
Total	Mean	47.45	50.42	16.01	19.63	23.10	1.974
	<i>N</i>	278	278	278	278	278	261
	<i>S.D.</i>	14.037	13.292	6.763	8.056	15.226	.9697

Prior to analyzing the data, a new independent variable (replacing school type) was created by crossing the school type (GSA+, GSA-) with the participants' location (U.S., nonU.S.). The type x source variable was created for two reasons. First, the school experiences of students living outside the United States are likely different from those of U.S. students. A second reason for creating this new variable had to do with the study design. If this study only had used two groups, then it would have been most appropriate to use the Independent Samples *t* test. The *t* test, however, does not allow for covariates. Covariates were expected to explain a significant portion of the standard error. If covariates could not be used, the chances of Type II errors would increase. With four

groups, an analysis of covariance (ANCOVA), which does allow for covariates, would be the appropriate statistical test to use.

ANCOVA is a statistical test that compares between group differences with within-group differences. In this study the between-group differences would be differences that could be assumed to be explained by the independent variable, in this case the interaction of type of school with source (location of school). Within-group differences represent other factors that may influence the mental health scores unrelated to the independent variable. Covariates are factors that could be assumed to explain some of the standard error (within group differences). Data explained by covariates can be subtracted from the standard error, thereby increasing the ratio of between group differences with within group differences. This has the effect of increasing the statistical power.

ANCOVA assumes that three conditions are true. First, it assumes the cases represent a random sample of the population. The majority of the data collected for this survey were obtained via two subreddit groups; other data were collected by connecting with friends and asking them to pass along the survey to others who might fit the inclusion criteria. The data collected for this survey were collected via convenience and snowball sampling methods. Although a random sampling would have been more appropriate, collecting data using this method would have been very difficult and time consuming.

A second assumption of ANCOVA is that the data is normally distributed. Data can be assumed to be normally distributed if the skewness is between -2 and +2 and the

kurtosis is between -2 and +6. As seen in tables 3-6, the data for all four groups can be assumed to be normally distributed.

Table 3

Skewness and Kurtosis U.S. GSA+

	State Anxiety	Trait Anxiety	Self- Esteem	Life Satisfaction	Depression	Internalized Homophobia
Skewness	-.135	-.226	.206	.013	.294	1.453
Kurtosis	-.758	-.746	-.971	-1.109	-.956	2.641

Table 4

Skewness and Kurtosis U.S. GSA-

	State Anxiety	Trait Anxiety	Self- Esteem	Life Satisfaction	Depression	Internalized Homophobia
Skewness	.003	-.161	.073	.105	.308	1.079
Kurtosis	-.842	-.669	-.357	-1.164	-.905	.613

Table 5

Skewness and Kurtosis Non U.S. GSA+

	State Anxiety	Trait Anxiety	Self- Esteem	Life Satisfaction	Depression	Internalized Homophobia
Skewness	.918	.499	.010	-.692	.883	1.027
Kurtosis	-.219	-.405	-1.430	.774	-.648	1.232

Table 6

Skewness and Kurtosis Non U.S. GSA-

	State Anxiety	Trait Anxiety	Self- Esteem	Life Satisfaction	Depression	Internalized Homophobia
Skewness	-.003	-.198	-.207	-.102	.240	1.055
Kurtosis	-1.146	-.853	-.424	-.885	-.980	.373

A third assumption is that the variances between groups is homogeneous. The Levene Test of Homogeneity of Variances was run to test this assumption. As one can see from table 7 below, the data from internalized homophobia cannot be assumed to be homogeneous. These data were excluded from further evaluation. Data from the remaining five dependent variables can be assumed to be homogeneous.

Table 7

Levene Test of Homogeneity of Variances

	Levene Statistic	Sig.
State Anxiety Trait	1.083	.356
Anxiety Self-Esteem	.914	.434
Life Satisfaction	.502	.681
Depression	1.195	.312
Internalized Homophobia	1.443	.230
	5.349	.001

Although the data from this sample were not randomly collected, the data could be presumed to be normally distributed, and variances in data from five of the six mental health measures could be assumed to be homogeneous. Therefore, it was determined that ANCOVA could be used to determine if the independent variable (type x source) could explain a significant portion of the differences in mental health scores.

Next, I needed to determine which, if any, of the covariate variables could be used to explain portions of the standard error. A series of tests were run to identify which covariates could be used with each of the five mental health measures.

The first step was to determine if any of the covariates are significantly related to each other (multicollinearity). Linear regression was performed with each covariate variable being entered as the dependent variable and the remaining dependent variables being entered as the independent variables. A value of more than 3 indicates multicollinearity. As one can see in Table 8, none of the values are 3 or larger. None of the covariate variables are significantly related to one another.

Table 8

Test of Multicollinearity (VIF Value)

	Sex	Gender	Gender Conformity	Sexual Orientation	Race
Sex		1.056	1.027	1.042	1.013
Gender	1.131		1.045	1.068	1.040
Gender Conformity	1.615	1.536		1.066	1.040
Sexual Orientation	1.601	1.533	1.042		1.032
Race	1.602	1.536	1.046	1.062	

The next step was to determine if any of the covariates significantly interact with the independent variable. As seen in Table 9, sex and race significantly interact with the independent variable, and therefore will be excluded. Gender was excluded because only 20% of the cases are non-male, therefore including gender might lead to erroneous results.

Table 9

Homogeneity of Regression Slopes

	Sex	Gender	Gender Conformity	Sexual Orientation	Race
Type X Source	.046	.635	.077	.536	.008

I then determined if the remaining covariate variables (gender conformity and sexual orientation) interacted significantly with any of the dependent variables. If not, then they were excluded. Internalized homophobia was previously excluded from further consideration because the variances between the four levels of independent variable could not be presumed to be heterogeneous. As one can see in Table 10, sexual orientation was not significantly related to any of the remaining five dependent variables. Therefore, sexual orientation was excluded as a covariate variable. Gender conformity was significantly related to state anxiety, self-esteem, and depression. It was included as a second independent variable for those variables, but not for life satisfaction or trait anxiety.

Table 10

Interaction of Covariate Variables with Dependent Variables

	State Anxiety	Trait Anxiety	Self- Esteem	Life Satisfaction	Depression
Gender Conformity	.039	.064	.012	.082	.002
Sexual Orientation	.318	.164	.182	.362	.074

Results

In table 11, one can see that self-esteem, life satisfaction, and depression were all significantly related to the interaction of the type of school (GSA+, GSA) and whether or not the participant graduated from a high school assumed to be in the United States (U.S., Non U.S.).

Table 11

ANCOVA Dependent Variables

	<i>Df</i>	<i>F</i>	<i>Sig.</i>	<i>Adj. R²</i>
State Anxiety*	11	1.366	.189	.014
Trait Anxiety	3	1.777	.152	.008
Self-Esteem*	11	1.828	.049	.032
Life Satisfaction	3	2.792	.041	.019
Depression*	11	2.835	.002	.068

* Gender conformity was added as a second independent variable

Post Hoc Tests

The next step involved determining if a particular Type X source group differed significantly from the other three Type X source groups. The Fisher's Least Significant Difference (LSD) post hoc test was run for all dependent variables that were significantly related to the independent variable, Type X source.

In Table 12, one can see that graduates of U.S. GSA+ schools had significantly higher levels of self-esteem than graduates of U.S. GSA- high schools. No other groups differed significantly. In indicated in Table 13, participants who identified as gender conforming also had significantly higher levels of self-esteem than participants who

identified as gender non-conforming. Participants who identified as neither gender conforming nor gender non-conforming did not differ significantly from either group.

Table 12

Self-Esteem and Gender Conformity LSD (Self-Esteem)

(I) Type X Source	(J) Type X Source	Mean Difference (I-J)	Std. Error	Sig.
U.S. GSA+	U.S. GSA-	2.10	.984	.034
	Non U.S. GSA+	-.54	1.717	.751
	Non U.S. GSA-	1.24	1.030	.228
U.S. GSA-	U.S. GSA+	-2.10	.984	.034
	Non U.S. GSA+	-2.64	1.715	.125
	Non U.S. GSA-	-.85	1.028	.407
Non U.S. GSA+	U.S. GSA+	.54	1.717	.751
	U.S. GSA-	2.64	1.715	.125
	Non U.S. GSA-	1.79	1.742	.305
Non U.S. GSA-	U.S. GSA+	-1.24	1.030	.228
	U.S. GSA-	.85	1.028	.407
	Non U.S. GSA+	-1.79	1.742	.305

Table 13

Self-Esteem and Gender Conformity LSD (Gender Conformity)

(I) GENCON	(J) GENCOM	Mean Difference (I-J)	Std. Error	Sig.
Conforming	Nonconforming	4.09	1.411	.004
	Neither	1.28	1.043	.222
Non-Conforming	Conforming	-4.09	1.411	.004
	Neither	-2.81	1.625	.084

Neither	Conforming	-1.28	1.043	.222
	Nonconforming	2.81	1.625	.084

Results displayed in Table 14 indicate that in terms of life satisfaction, there was also a significant difference between participants who had graduated from a U.S. GSA+ high school and participants who had graduated from a U.S. GSA- high school. There was also a significant difference in graduates from non U.S. GSA+ high schools and graduates of U.S GSA- high schools.

Table 14

Life Satisfaction LSD

(I)Type X Source	(J) Type X Source	Mean Difference (I-J)	Std. Error	Sig.
U.S. GSA+	U.S. GSA-	2.64	1.180	.026
	Non U.S. GSA+	-1.84	2.058	.371
	Non U.S. GSA-	1.99	1.235	.109
U.S. GSA-	U.S. GSA+	-2.64	1.180	.026
	Non U.S. GSA+	-4.48	2.056	.030
	Non U.S. GSA-	-.65	1.232	.596
Non U.S. GSA+	U.S. GSA+	1.84	2.058	.371
	U.S. GSA-	4.48	2.056	.030
	Non U.S. GSA-	3.83	2.089	.068
Non U.S. GSA-	U.S. GSA+	-1.99	1.235	-.109
	U.S. GSA-	.65	1.232	.596
	Non U.S.	-3.83	2.089	.068
	GSA+			

In table 15, one can see that in terms of depression there was significant difference only between graduates of non U.S. GSA+ high schools and graduates of U.S. GSA- high schools.

Table 15

Depression and Gender Conformity LSD (Depression)

(I) Type X Source	(J) Type X Source	Mean Difference (I-J)	Std. Error	Sig.
U.S. GSA+	U.S. GSA-	-3.31	2.173	.128
	Non U.S. GSA+	5.88	3.792	.122
	Non U.S. GSA-	-1.04	2.276	.647
U.S. GSA-	U.S. GSA+	3.31	2.173	.128
	Non U.S. GSA+	9.19	3.789	.016
	Non U.S. GSA-	2.27	2.270	.318
Non U.S. GSA+	U.S. GSA+	-5.88	3.792	.122
	U.S. GSA-	-9.19	3.789	.016
	Non U.S. GSA-	-6.92	3.848	.073
Non U.S. GSA-	U.S. GSA+	1.04	2.276	.647
	U.S. GSA-	-2.27	2.270	.318
	Non U.S. GSA+	6.92	3.848	.073
	Non U.S. GSA-			

Table 16 shows that students who identified as gender-conforming or neither gender conforming nor gender nonconforming were significantly less depressed than students identifying as gender nonconforming.

Table 16

Depression and Gender Conformity LSD (Gender Conformity)

(I) GENCON	(J) GENCON	Mean Difference (I-J)	Std. Error	Sig.
Conforming	Nonconforming	-11.04	3.117	.000
	Neither	-2.77	2.304	.230
Non- Conforming	Conforming	11.04	3.117	.000
	Neither	8.27	3.589	.022
Neither	Conforming	2.77	2.304	.230
	Nonconforming	-8.27	3.589	.022

Research Questions

Question 1: While controlling for level of gender conformity, there was no significant difference in the levels of state anxiety among the four Type x source groups. There was also no significant difference in levels of trait anxiety among the four Type x source groups. This portion of the null hypothesis is accepted. After controlling for level of gender conformity, there was a significant difference in levels of depression, but only between non U.S. GSA+ and U.S. GSA- (Fisher's LSD = .016). This portion of the null hypothesis is rejected.

Question 2: While controlling for levels of gender conformity, there was a significant difference in levels of self-esteem between U.S. GSA+ and U.S. GSA- graduates (Fisher's LSD = .034). The null hypothesis is rejected.

Question 3: There was a significant difference in levels of life satisfaction between U.S. GSA+ and U.S. GSA- graduates (Fisher's LSD = .026) and between U.S. GSA- and non U.S. GSA+ (Fisher's LSD = .030). The null hypothesis is rejected.

Question 4: Data from the internalized homophobia variable could not be analyzed because the variance in the data was not homogeneous.

Summary

The purpose of this study was to determine if the type of high school attended (LGBT, GSA+, GSA-) was associated with young adult mental health. Despite making several attempts, no graduates of LGBT high schools chose to participate in this study. I was unable to determine to what extent attending a LGBT high school is associated with young adult mental health. In addition to the 183 U.S. participants, 95 people participated from outside the United States. However, of the non U.S. participants, only 18 had graduated from a GSA+ high school. Data from the non U.S. sample should be interpreted with caution.

The majority of the study participants described themselves as white, gender conforming males. Because there were relatively few women or gender variant individuals, caution should be used when generalizing the findings of this study to those populations. If more females and gender variant individuals had participated in this study, the results of this study may have been more significant. For instance, gender was significantly associated with several of the dependent variables but was not entered as a separate factor because doing so might lead to Type I errors. The results of this study suggest that the type of high school one attended continues to contribute to levels of self-

esteem, life satisfaction, and depression into young adulthood. While significant, the type x source of school interaction explained very little of the variance of self-esteem (3.2%), life satisfaction (1.9%), and depression (6.8%). Depression was only significantly different between non U.S. GSA+ graduates and U.S. GSA- graduates.

Level of gender conformity was significantly associated with self-esteem and depression. Young adults identifying as gender nonconforming had significantly lower levels of self-esteem than students identifying as gender conforming. Gender nonconforming young adults were also significantly more depressed than young adults identifying as either gender conforming or neither gender conforming nor gender nonconforming.

Chapter 5: Discussion, Conclusion, Recommendations

Introduction

The purpose of this study was to determine if the type of high school attended was associated with young adult mental health. If a positive relationship were found between attending LGBT high schools and better mental health, more of these high schools might have been opened in the future. A positive correlation between LGBT high schools and mental health might also encourage mainstream high schools to add a GSA to their campus or make other changes to improve the overall school climate for LGBT students.

This survey used in this quantitative study consisted of 95 questions. Participants were asked to provide demographic information and then complete six short mental health measures. Two hundred eighty-three U.S. participants and 95 non U.S. participants completed the survey. The independent variable for this study was the cross of type of high school attended and source of data, for a total of four groups: U.S. GSA+, U.S. GSA-, non U.S. GSA+, and non U.S. GSA-. The dependent variables were five mental health measures: anxiety (state and trait), self-esteem, life satisfaction, depression, and internalized homophobia. The study also included five potential covariate variables: sex, gender, level of gender conformity, sexual orientation, and race. This chapter will include a summary and interpretation of the study's findings, recommendations for further research, and implications for positive social change.

Summary of the Findings

Because no students who had attended an LGBT high school chose to participate in this study, I was not able to confirm an association between attending an LGBT high

school and better mental health. By the conclusion of that data collection process, 278 people had completed the online survey; 183 were located in the United States and 95 were located outside of the United States. Most of the non U.S. participants resided in Europe and Canada.

A preliminary analysis of the data found that of the four groups (U.S. GSA+, U.S. GSA-, non U.S. GSA+, non U.S. GSA-) graduates of U.S. GSA- high schools had the lowest levels of self-esteem and life satisfaction and the highest levels of state and trait anxiety, depression, and internalized homophobia. Graduates of non U.S. GSA+ high schools had the highest levels of self-esteem and life satisfaction and the lowest levels of state and trait anxiety, depression, and internalized homophobia.

Further analysis of the data found that the data for all groups and mental health measures were normally distributed, and the variances from all mental health measures (except internalized homophobia) were found to be homogeneous. Therefore, an analysis of covariance (ANCOVA) was determined to be the appropriate statistical test for this study.

Next, it was determined that of all five possible covariate variables (sex, gender, gender identity, level of gender conformity, and race) only level of gender conformity and sexual orientation were found to be valid covariate variables. However, sexual orientation was not found to interact significantly with any of the dependent variables; level of gender conformity was found to interact significantly with state anxiety, self-esteem, and depression.

ANCOVA was run with all five remaining dependent variables. Self-esteem, life satisfaction, and depression were found to be significantly related to the independent variable. However, none of these dependent variables were found to explain a large portion of the variances in mental health scores. Post-hoc tests found that self-esteem and life satisfaction were significantly different between U.S. GSA+ and U.S. GSA- graduates. Depression was significantly different between U.S. GSA- and non U.S. GSA+ graduates.

All four groups met the criteria for subthreshold depressive symptoms. Some individuals also met the criteria for Major Depressive Disorder (MDD), but providing individual diagnoses was beyond the scope of this study. Individuals identifying as gender nonconforming were also significantly more likely to have lower levels of self-esteem and higher levels of depression.

Interpretation of Findings

Previous researchers have found that having attended a high school with a GSA on campus was negatively associated with depression and positively associated self-esteem in both current LGBT students and young adults (Toomey et al., 2011; Heck et al., 2011). However, Toomey et al. found that levels of student depression were also associated with the perceived effectiveness of the GSA and whether the student participated in the GSA or merely attended a school with a GSA on campus.

The current study failed to confirm a significant difference in levels of depression between graduates of U.S. GSA+ and U.S. GSA- high schools, although there was a significant difference in levels of depression between non U.S. GSA+ high school

graduates and U.S. GSA- high school graduates. This may be due to the fact that half of the non-US. GSA+ participants currently live in Canada. Since 1995, sexual orientation has been listed as a protected class in the Canadian Charter of Rights and Freedoms (Meyer & Stader, 2009).

Some Canadian provinces provide additional protections such as Ontario's Equity and Inclusive Education Strategy (St. John et al., 2014). Many Canadian high schools allow GSA members from multiple schools to come together for conferences, dances, and other networking opportunities (St. John et al., 2014). It is thought that by providing these opportunities GSA members can begin to compare themselves with other GSA members instead of with the heterosexual majority at their respective high schools. This in turn may lead to higher levels of self-esteem and lower levels of isolation (St. John et al., 2014). This might explain why young adults graduating from non U.S. GSA+ high schools were less depressed than young adults graduating from U.S. GSA+ high schools, although not significantly so. While it was beyond the scope of this study to provide a DSM depression diagnosis for individual participants, all four groups met the diagnostic criteria for subthreshold depressive symptoms, defined as having a CESD-R score of at least 16 (average score for all groups was 19).

The current study confirms a positive association between GSA presence and self-esteem and life satisfaction among U.S. high school graduates; however, the location and type of high school explained only a small portion of the variances self-esteem and life satisfaction. This suggests that having simply attended a GSA+ high school probably makes little difference in how young adults view themselves and their lives. The mean

for all groups was in the low average range for self-esteem and the average range for life satisfaction. This study did not find a significant difference in levels of state or trait anxiety between any of the four groups. State anxiety describes temporary fear or anxiousness this is brought upon by situations that the person interprets as dangerous (C. Spielberger, 1983). Trait anxiety describes a personality characteristic that is more permanent and not directly related to any particular situation (C. Spielberger, 1983).

These results are not particularly surprising for a number of reasons. First, the participants in this study are no longer in high school. Any difference in levels of current state anxiety would be unrelated to anxiety provoking high school experiences. Second, it would be unlikely that trait anxiety would be related to whether or not an individual attended a high school with a GSA on campus or whether the student lived in the U.S. or abroad. Despite finding no significant difference between any of the four groups, all four groups had mean state and trait anxiety scores that were approximately 10 points higher than the state and trait anxiety scores for college students or working adults (C. Spielberger, 1983).

This study could not confirm an association between the independent variable and internalized homophobia. First, the mean difference between the group with the lowest internalized homophobia score and the group with the highest mean homophobia score was less than the standard error for any group. Second, the data were not homogeneous, and therefore could not be analyzed. The statements that participants were asked to respond to on the revised internalized homophobia scale (IHP-R) measure deep-rooted beliefs, for example, *I wish I weren't lesbian/bisexual [gay/bisexual]*, that are unlikely to

be significantly influenced by the type and location of one's school. Instead, these beliefs are likely most related to family and cultural upbringing.

Herek's two theories grounding this study demonstrate ways in which sexual and gender minorities are hurt by segments of the mainstream heterosexually-identifying population (Herek, 1986; Herek et al., 2015). Bullying is often an easy way to achieve or improve one's status among one's peer group, which in turn can lead to higher status with opposite-sexed peers (Sijtsema et al., 2009). Gender nonconforming students are not only more likely to be bullied by heterosexuals than gender conforming LGBT students, but are also likely to be alienated from the larger gender conforming LGBT population as well (Gerulf Rieger & Savin-Williams, 2012). Toomey et al. (2013) found that LGBT gender nonconforming youth were significantly more depressed and had lower levels of life satisfaction than LGBT gender conforming youth. Gender nonconforming young adults were also significantly more depressed than gender conforming young adults. Level of gender conformity was not found to be significantly related to life satisfaction in this study.

It is not enough anymore to prevent direct and observable forms of bullying. Indirect forms of bullying, such as exclusion, can be just as hurtful as being pushed or verbally abused (Cole et al., 2014b). Schools need to provide LGBT students with the same opportunities afforded to heterosexual cisgender students. For instance, lesbian, gay, and bisexual students should be allowed to bring same sex peers to school dances if they choose to do so. Transgender students should be addressed by their preferred name and pronoun, and be allowed to wear appropriate clothing of their choosing.

Limitations of the Study

The majority of the participants in this study were White, gender-conforming males. The results may not accurately portray the mental health of female, gender nonconforming, or gender variant individuals. The survey associated with this study was administered via Survey Monkey. Close to 40% of the respondents did not complete the survey. Likely, this was due to the fact that the survey consisted of approximately 90 questions and participants were not compensated. The majority of those that did complete the survey took fewer than 10 minutes to do so. It is possible that some participants did not take enough time to complete the survey accurately.

Another limitation was the relatively small non U.S. GSA+ sample size. Among non U.S. participants, 18 graduated from a GSA+ high school and 77 graduated from a GSA- high school. The majority of the non U.S. participants were currently residing in either England or Canada. There were few participants from Asia and no participants currently living in Africa.

Many of the intended covariate variables, for example, sex and gender, could not be used in the ANCOVA calculations because too few non-male participants completed surveys for this study. If the participants were more equally represented the findings of this study might have been different.

Initially, this study was to be limited to LGBT young adults. However, five percent of the sample did identify as heterosexual. Heterosexuals also identified as transgender. Additionally, some cisgender heterosexuals identified as gender

nonconforming. Sexual orientation also was not significantly related to any of the dependent variables.

Recommendations for Further Research

The term LGBT often implies that the needs of lesbian, gay, bisexual, and transgender people are the same, when in fact, they are often not. Lesbian, gay, and bisexual people are sexual minorities, while transgender people are gender minorities. The survey for this study was, in many ways, not appropriate for transgender participants. First, the demographic questions were difficult for some transgender participants to answer (as I discovered during discussions in the asktransgender subreddit group). For instance, is a person who was born a male and chooses to live as a female gender conforming? That depends on whether or not the question is referring to the gender in which the person was raised or the gender in which the individual now identifies. Is a transgender male, who previously identified as a lesbian, now heterosexual? Some transgender participants argued that the terms male-to-female (MtF) and female-to-male (FtM) were not genders but identities. Some of the mental health measures were also inappropriate. For instance, the revised internalized homophobia scale never mentions transgender people.

Currently, many schools may have very few, if any, transgender students, on their campuses. However, as transgender people become more mainstream, it is likely that more youth will begin to identify as transgender at earlier ages. Transgender youth differ from LGB youth in that they often require medical interventions in order to be able to comfortably live as a member of the gender of their choosing. Specific areas of

research might include the cost and benefits of starting hormone blockers and hormone therapy at different ages, how to best provide counseling to youth who are considering gender conforming surgery, and how to counsel parents of transgender youth. While providing medical advice and counseling would be outside the realm of most school personnel, school nurses, counselors, and school psychologists might find themselves in situations where transgender specific training is needed. These professionals might also be called upon to develop a set of best practices in working with transgender students. A recent study of 237 transgender youth found that over 30% of them had attempted suicide sometime in their lifetime (Mustanski & Liu, 2013). It seems clear that the needs of these youth are not being met.

Implications for Social Change

The potential implications for social change include a better understanding of the relationship between GSAs and positive mental health. While this study primarily involved LGBT young adults, at least one large study involving almost 16,000 Wisconsin students found that both heterosexual and LGBT students benefit (less likely to be truant, drink, smoke, engage in casual sex, or attempt suicide) from attending schools with GSAs on campus (Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013).

It is important that school administrators are aware that GSAs are not just for LGBT students. Furthermore, administrators should understand that the benefits of attending a school with a GSA extend beyond high school graduation. Results from the current study indicate that young adults who had attended a high school with a GSA on

campus had significantly higher levels of self-esteem and life satisfaction than young adults who had attended a high school without a GSA on campus.

It is also important that school administrators understand that students who present as gender nonconforming in high school are at an increased risk of being bullied; furthermore, youth bullied at school (due to sexual minority or gender nonconformity) are more likely to be depressed and have lower levels of life satisfaction than students bullied for other reasons (Toomey et al., 2013). The current study suggests that for some students the depression experienced in high school as a result of gender nonconformity continues into young adulthood.

School administrators, especially those serving schools in socially conservative neighborhoods, may be hesitant to make changes that could be perceived by some to be encouraging a homosexual lifestyle. The Gay, Lesbian, Straight Education Network (GLSEN) is an excellent resource for administrators who may want to make changes but are unsure of how to go about doing so.

A summary of the significant findings of this dissertation will be sent to superintendents of public instruction for all 50 U.S. states along with information about GLSEN. The accompanying letter will reference several additional studies that have shown an association between GSAs and student mental and physical health. GSAs also make financial sense in that students attending schools with GSAs are less likely to be truant. Truancy costs districts money.

The author will request that state superintendents pass along these findings to district superintendents who will, theoretically, pass the information to school principals.

In the end, every school that agrees to host a GSA on campus will potentially affect hundreds of students, gay and straight alike.

Conclusion

Herek's neofunctional theory explains that people benefit psychologically when they express personal values (G. M. Herek, 1986), such as values that express a preference for heteronormativity. Other people feel a strong need to be part of a group; the need to belong can be so great that at times people will express a value or opinion publically when in fact they might actually believe just the opposite (G. M. Herek, 1986). This theory describes the bully/follower partnership. The bully benefits by expressing a value, and the followers benefit by being accepted as part of the group.

Sexual minorities and gender nonconforming students are at an increased risk of being bullied at school. Bullying has been shown to lead to negative mental and physical health outcomes, some of which persist into young adulthood. What is more, applications like Snapchat allow bullies to take videos of events and send them to friends and acquaintances who can view the videos for five seconds, after which the videos are erased. This allows bullies to publically humiliate victims without much fear of being punished.

The purpose of this study was to determine if there was an association between having attended a high school with a GSA and young adult mental health. For the purposes of this study mental health included state and trait anxiety, depression, self-esteem, life satisfaction, and internalized homophobia.

Results from this study found that young adults who had attended a high school with a GSA on campus had significantly higher levels of self-esteem and life satisfaction when compared with young adults who had attended a high school without a GSA on campus. However, the variances in self-esteem and life satisfaction explained by having a GSA on campus were relatively small. Furthermore, all four groups in this study met the diagnostic criteria for subthreshold depressive symptoms. Additionally, all four groups had higher levels of anxiety than either college students or working adults.

This suggests that while GSAs do provide a measure of support for LGBT students, GSAs alone might not be enough, especially for students who identify as gender nonconforming. The sexual stigma theory posited by Herek explains that heterosexist culture is detrimental to both heterosexual and LGBT students (Herek et al., 2015). Most students will conform to rigorous gender prototypes to avoid being labeled gay. Students who choose not to conform to gender prototypes are oftentimes harassed and victimized by others who feel threatened by their behavior.

Results of this study found that level of gender conformity (but not sexual orientation) contributed significantly to levels of state anxiety, self-esteem, and depression. Furthermore, young adults who identified as gender nonconforming were more likely to be depressed than young adults who identified as gender conforming.

While society seems more willing today to accept gender conforming sexual minorities, transgender and gender nonconforming individuals continue to be victims of discrimination and harassment. Recently, a young man wearing a dress on a public bus was set afire by a 16-year-old boy (Morrison, Farberov, & McCormick, 2013). Last year,

10 transgender women were murdered in the United States within a seven-month period (Blake, 2015).

While not specifically addressed by this study, GLSEN makes several recommendations for creating an inclusive school environment for LGBT youth. Some suggestions include adopting a comprehensive antibullying policy that specifically mentions protections for sexual and gender minority students, providing a LGBT-inclusive curriculum, and purchasing books for the classroom and the school library that include LGBT content. GLSEN also recommends hiring teachers and administrators who are willing to play a supportive role to LGBT students.

References

- Allport, G. W. (1950). Prejudice: A problem in psychological and social causation. *Journal of Social Issues*, 6(S4), 4–23. <http://doi.org/10.1111/j.1540-4560.1950.tb02175.x>
- Allport, G. W. (1966). The religious context of prejudice. *Journal for the Scientific Study of Religion*, 5(3), 447–457.
- Allport, G. W., & Schanck, R. L. (1936). Are attitudes biological or cultural in origin? *Character & Personality; A Quarterly for Psychodiagnostic & Allied Studies*, 4, 195–205.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology*, 51(5), 688–696. <http://doi.org/10.1037/a0038994>
- Ball, H. A., Arseneault, L., Taylor, A., Maughan, B., Caspi, A., & Moffitt, T. E. (2008). Genetic and environmental influences on victims, bullies and bully-victims in childhood. *Journal of Child Psychology & Psychiatry*, 49(1), 104–112. <http://doi.org/10.1111/j.1469-7610.2007.01821.x>
- Balsam, K. F., Lehavot, K., Beadnell, B., & Circo, E. (2010). Childhood abuse and mental health indicators among ethnically diverse lesbian, gay, and bisexual adults. *Journal of Consulting & Clinical Psychology*, 78(4), 459–468. <http://doi.org/10.1037/a0018661>

- Barnes, L. B., Harp, D., & Jung, W. S. (2002). Reliability generalization of scores on the Spielberger State-Trait Anxiety Inventory. *Educational and Psychological Measurement*, 62, 603–618. <http://doi.org/10.1177/0013164402062004005>
- Bauermeister, J., Johns, M., Sandfort, T., Eisenberg, A., Grossman, A., & D'Augelli, A. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth & Adolescence*, 39(10), 1148–1163. <http://doi.org/10.1007/s10964-010-9557-y>
- Blake, A. (2015a, July 23). 10 transgender women killed so far in 2015. *The Washington Times*. Tampa, FL. Retrieved from <http://www.washingtontimes.com/news/2015/jul/23/ten-transgender-women-killed-so-far-2015/print/>
- Boulton, M. J., & Smith, P. K. (1994). Bully/victim problems among middle school children: Stability, self-perceived competence, peer perception and peer acceptance. *British Journal of Educational Psychology*, 12, 315–329.
- Branigan, T. (2003). Responding to a need, or to fear? *Washington Post, The*, p. A03. New York, NY.
- Camodeca, M., & Goossens, F. A. (2005). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology & Psychiatry*, 46(2), 186–197. <http://doi.org/10.1111/j.1469-7610.2004.00347.x>
- Center for Disease Control. (2009). Web-based injury statistics query and reporting system (WISQARS). Center for Disease Control. Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>

- Center for Epidemiologic Studies. (2015). CESD-R: Center for Epidemiologic Studies Depression Scale Revised Online Depression. Retrieved May 11, 2015, from <http://cesd-r.com/cesdr>
- Centers for Disease Control. (2008). Youth risk behavioral surveillance-United States, 2007. *Morbidity and Mortality Weekly Report*, 57, 1–131.
- Clarkson, J. (2006). “Everyday Joe” versus “pissy, bitchy, queens”: Gay masculinity on straighttacting.com. *Journal of Men’s Studies*, 14(2), 191–207.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159. <http://doi.org/10.1037/0033-2909.112.1.155>
- Cole, D. A., Dukewich, T. L., Roeder, K., Sinclair, K. R., McMillan, J., Will, E., ... Felton, J. W. (2014a). Linking peer victimization to the development of depressive self-schemas in children and adolescents. *Journal of Abnormal Child Psychology*, 42(1), 149–160. <http://doi.org/10.1007/s10802-013-9769-1>
- Cole, D. A., Dukewich, T. L., Roeder, K., Sinclair, K. R., McMillan, J., Will, E., ... Felton, J. W. (2014b). Linking peer victimization to the development of depressive self-schemas in children and adolescents. *Journal of Abnormal Child Psychology*, 42(1), 149–160. <http://doi.org/10.1007/s10802-013-9769-1>
- Cornell, D., Gregory, A., Huang, F., & Fan, X. (2013). Perceived prevalence of teasing and bullying predicts high school dropout rates. *Journal of Educational Psychology*, 105(1), 138–149. <http://doi.org/10.1037/a0030416>

- Craig, S., Austin, A., & McInroy, L. (2014). School-based groups to support multiethnic sexual minority youth resiliency: Preliminary effectiveness. *Child & Adolescent Social Work Journal*, 31(1), 87–106. <http://doi.org/10.1007/s10560-013-0311-7>
- Creswell, J. W. (2008). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Sage Publications, Inc.
- Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development*, 67, 993–1002.
- Currie, S., Mayberry, M., & Chenneville, T. (2012). Destabilizing anti-gay environments through gay-straight alliances: Possibilities and limitations through shifting discourses. *Clearing House*, 85(2), 56–60.
<http://doi.org/10.1080/00098655.2011.611190>
- Demo, D. H. (1985). The measurement of self-esteem: Refining our methods. *Journal of Personality and Social Psychology*, 48(6), 1490–1502.
<http://doi.org/10.1037/0022-3514.48.6.1490>
- De Ridder, K. A. A., Pape, K., Cuypers, K., Johnsen, R., Holmen, T. L., Westin, S., & Bjørngaard, J. H. (2013). High school dropout and long-term sickness and disability in young adulthood: A prospective propensity score stratified cohort study (the Young-HUNT study). *BMC Public Health*, 13, 941–941.
<http://doi.org/10.1186/1471-2458-13-941>
- Diener, E. (2006). Understanding the Satisfaction With Life Scale.
- Drucker, D. (2012). Marking sexuality from 0-6: The Kinsey scale in online culture. *Sexuality & Culture*, 16(3), 241–262. <http://doi.org/10.1007/s12119-011-9122-1>

- Eldridge, J., & Johnson, P. (2011). The relationship between old-fashioned and modern heterosexism to social dominance orientation and structural violence. *Journal of Homosexuality*, 58(3), 382–401. <http://doi.org/10.1080/00918369.2011.546734>
- Elia, J. P. (2010). Bisexuality and school culture: School as a prime site for bi-intervention. *Journal of Bisexuality*, 10(4), 452–471.
- Elipi, P., Mora-Merchán, J. A., Ortega-Ruiz, R., & Casas, J. A. (2015). Perceived emotional intelligence as a moderator variable between cybervictimization and its emotional impact. *Frontiers in Psychology*, 6, 1–11. <http://doi.org/10.3389/fpsyg.2015.00486>
- Espelage, D. L., Aragon, S. R., Birkett, M., & Koenig, B. W. (2008). Homophobic teasing, psychological outcomes, and sexual orientation among high school students: What influence do parents and schools have? *School Psychology Review*, 37(2), 202–216.
- Fanti, K. A., & Kimonis, E. R. (2013). Dimensions of juvenile psychopathy distinguish “bullies,” “bully-victims,” and “victims.” *Psychology of Violence*, 3(4), 396–409. <http://doi.org/10.1037/a0033951>
- Fingerhut, A. W., Peplau, L. A., & Gable, S. L. (2010). Identity, minority stress and psychological well-being among gay men and lesbians. *Psychology & Sexuality*, 1(2), 101–114. <http://doi.org/10.1080/19419899.2010.484592>
- Foster, T. A. (2011). The sexual abuse of Black men under American slavery. *Journal of the History of Sexuality*, 20(3), 445–464.

- Franklin, K. (2013). "Baton bullying": Understanding multi-aggressor rotation in anti-gay harassment cases. *National Lawyers Guild Review*, 70(3), 174–187.
- Frost, D. M., & Bastone, L. M. (2008). The role of stigma concealment in the retrospective high school experiences of gay, lesbian, and bisexual individuals. *Journal of LGBT Youth*, 5(1), 27–36. <http://doi.org/10.1300/J524v05n01-04>
- GLSEN. (2012). *The 2011 National School Climate Survey: Key findings on the experiences of lesbian, gay, bisexual and transgender youth in our nation's schools. Executive summary*. Gay, Lesbian and Straight Education Network (GLSEN).
- Goldberg, S. (1999). *Why men rule: A theory of male dominance*. Chicago: Open Court.
- Goldstein, S. B., & Davis, D. S. (2010). Heterosexual allies: A descriptive profile. *Equity & Excellence in Education*, 43(4), 478–494.
- Gottheil, N. F., & Dubow, E. F. (2001). Tripartite beliefs models of bully and victim behavior. *Journal of Emotional Abuse*, 2(2/3), 25–47.
- Gower, A. L., & Borowsky, I. W. (2013). Associations between frequency of bullying involvement and adjustment in adolescence. *Academic Pediatrics*, 13(3), 214–221. <http://doi.org/10.1016/j.acap.2013.02.004>
- Gray, B. (2009). *Leviticus revealed*. New York: IUniverse, Inc.
- Greytak, E. A., Kosciw, J. G., & Boesen, M. J. (2013). Putting the "T" in "resource": The benefits of LGBT-related school resources for transgender youth. *Journal of LGBT Youth*, 10(1-2), 45–63.

- Griffin, P., Lee, C., Waugh, J., & Beyer, C. (2004). Describing roles that gay-straight alliances play in schools: From individual support to school change. *Journal of Gay & Lesbian Issues in Education*, 1(3), 7–22.
- Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., Clayton, P. J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, 58(1), 10–51. <http://doi.org/10.1080/00918369.2011.534038>
- Hans, J. D., Kersey, M., & Kimberly, C. (2012). Self-perceived origins of attitudes toward homosexuality. *Journal of Homosexuality*, 59(1), 4–17. <http://doi.org/10.1080/00918369.2012.638547>
- Hatzenbuehler, M. L., McLaughlin, K. A., & Nolen-Hoeksema, S. (2008). Emotion regulation and internalizing symptoms in a longitudinal study of sexual minority and heterosexual adolescents. *Journal of Child Psychology and Psychiatry, And Allied Disciplines*, 49(12), 1270–1278. <http://doi.org/10.1111/j.1469-7610.2008.01924.x>
- Heck, N. C., Flentje, A., & Cochran, B. N. (2013). Offsetting risks: High school gay-straight alliances and lesbian, gay, bisexual, and transgender (LGBT) youth. *Psychology of Sexual Orientation and Gender Diversity*, 1(S), 81–90.
- Herek, G., Cogan, J., Gillis, J. R., & Glunt, E. (1997). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal of the Gay and Lesbian Medical Association*, 2, 17–25.

Herek, G. M. (1986a). The instrumentality of attitudes: Toward a neofunctional theory.

Journal of Social Issues, 42(2), 99–114.

Herek, G. M. (2002). Thinking about AIDS and stigma: A psychologist's perspective.

Journal of Law, Medicine & Ethics, 30(4), 594.

Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice.

Journal of Social Issues, 63(4), 905–925. <http://doi.org/10.1111/j.1540-4560.2007.00544.x>

Herek, G. M., D'Augelli, A. R., & Patterson, C. J. (1995). Psychological heterosexism in the United States. In *Lesbian, Gay, & Bisexual Identities Over the Lifespan* (p. 321). Oxford University Press, Inc.

Herek, G. M., Gillis, J. R., & Cogan, J. C. (2015a). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Stigma and Health*, 1(5), 18–34. <http://doi.org/10.1037/2376-6972.1.S.18>

Herpertz-Dahlmann, B., Bühren, K., & Remschmidt, H. (2013). Growing up is hard.

Deutsches Aerzteblatt International, 110(25), 432–440.
<http://doi.org/10.3238/arztebl.2013.0432>

Hetzel, C. J. (2011). Exploring the relationship between public opinion and personal attitudes and behavior toward lesbians and gay men: Social conformity revisited.

Journal of Homosexuality, 58(10), 1421–1441.
<http://doi.org/10.1080/00918369.2011.614910>

Holmes, S. E., & Cahill, S. (2004). School experiences of gay, lesbian, bisexual and transgender youth. *Journal of Gay & Lesbian Issues in Education*, 1(3), 53–66.

- Ikomi, P. A. (2010). Juvenile violent felony referrals and high school dropouts: Is there a relationship? *International Journal of Academic Research*, 2(4), 379–384.
- Johnson, D. (2007). “This is political!” Negotiating the legacies of the first school-based gay youth group. *Children, Youth & Environments*, 17(2), 380–387.
- Jordan, K., & Austin, J. (2011). A review of the literature on bullying in U.S. schools and how a parent–educator partnership can be an effective way to handle bullying. *Journal of Aggression, Maltreatment & Trauma*, 21(4), 440–458.
<http://doi.org/10.1080/10926771.2012.675420>
- Kalman, I. (2013). Why psychology is failing to solve the problem of bullying. *International Journal on World Peace*, 30(2), 71–97.
- Karpman, B. (1950). Aggression. *American Journal of Orthopsychiatry*, 20(4), 694–718.
<http://doi.org/10.1111/j.1939-0025.1950.tb05470.x>
- Kassen, J., & Lapointe, A. (2013). Gay-straight alliances (GSA) and waves of change in school. *Our Schools / Our Selves*, 22(4), 163–173.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24(2), 163–204.
- Katz-Wise, S. L., & Hyde, J. S. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: A meta-analysis. *Journal of Sex Research*, 49(2/3), 142–167.
<http://doi.org/10.1080/00224499.2011.637247>
- Kaysen, D. L., Kulesza, M., Balsam, K. F., Rhew, I. C., Blayney, J. A., Lehavot, K., & Hughes, T. L. (2014). Coping as a mediator of internalized homophobia and psychological distress among young adult sexual minority women. *Psychology of*

Sexual Orientation and Gender Diversity, 1(3), 225–233.

<http://doi.org/10.1037/sgd0000045>

Kirchick, J. (2003). The folly of Harvey Milk High. *Advocate*, (898), 10.

Koiv, K. (2012). Attachment styles among bullies, victims and uninvolved adolescents. *Psychology Research*, 2, 160–165.

Kosciw, J. G., Bartkiewicz, M. J., & Greytak, E. A. (2012). Promising strategies for prevention of the bullying of lesbian, gay, bisexual, and transgender youth. *Prevention Researcher*, 19(3), 10–13.

Kosciw, J. G., Palmer, N. A., Kull, R. M., & Greytak, E. A. (2013). The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *Journal of School Violence*, 12(1), 45–63.

LaTorre, R. A., Yu, L., Fortin, L., & Marrache, M. (1983). Gender-role adoption and sex as academic and psychological risk factors. *Sex Roles*, 9(11), 1127–1136.

Latzman, R. D., Naifeh, J. A., Watson, D., Vaidya, J. G., Heiden, L. J., Damon, J. D., ... Young, J. (2011). Racial differences in symptoms of anxiety and depression among three cohorts of students in the Southern United States. *Psychiatry: Interpersonal and Biological Processes*, 74(4), 332–348.

<http://doi.org/10.1521/psyc.2011.74.4.332>

Lee, C. (2001). *The impact of belonging to a high school gay/straight alliance*.

Lester, L., Cross, D., Shaw, T., & Dooley, J. (2012). Adolescent bully-victims: Social health and the transition to secondary school. *Cambridge Journal of Education*, 42(2), 213–233. <http://doi.org/10.1080/0305764X.2012.676630>

- Lönnqvist, J., Verkasalo, M., Helkama, K., Andreyeva, G., Bezmenova, I., Rattazzi, A., ... Stetsenko, A. (2009). Self-esteem and values. *European Journal of Social Psychology*, 39(1), 40–51.
- Low, S., & Espelage, D. (2013). Differentiating cyber bullying perpetration from non-physical bullying: Commonalities across race, individual, and family predictors. *Psychology of Violence*, 3(1), 39–52. <http://doi.org/10.1037/a0030308>
- Luk, J. W., Wang, J., & Simons-Morton, B. G. (2010). Bullying victimization and substance use among U.S. adolescents: Mediation by depression. *Prevention Science*, 11(4), 355–359. <http://doi.org/10.1007/s11121-010-0179-0>
- Mayberry, M. (2013). Gay-straight alliances: Youth empowerment and working toward reducing stigma of LGBT youth. *Humanity & Society*, 37(1), 35–54. <http://doi.org/10.1177/0160597612454358>
- Mayes, T. A. (2006). Separate public high schools for sexual minority students and the limits of the Brown analogy. *Journal of Law & Education*, 35(3), 339–348.
- McDougall, P., & Vaillancourt, T. (2015). Long-term adult outcomes of peer victimization in childhood and adolescence: Pathways to adjustment and maladjustment. *American Psychologist*, 70(4), 300–310. <http://doi.org/10.1037/a0039174>
- Meaney, G. J., & Rye, B. J. (2010). Gendered egos: Attitude functions and gender as predictors of homonegativity. *Journal of Homosexuality*, 57(10), 1274–1302. <http://doi.org/10.1080/00918369.2010.517074>

- Menesini, E., Palladino, B. E., & Nocentini, A. (2015). Emotions of moral disengagement, class norms, and bullying in adolescence: A multilevel approach. *Merrill-Palmer Quarterly*, 61(1), 124–143.
- Meyer EJ, & Stader D. (2009). Queer youth and the culture wars: From classroom to courtroom in Australia, Canada and the United States. *Journal of LGBT Youth*, 6(2/3), 135–154 20p.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health & Social Behavior*, 36(1), 38–56.
- Mitchell, S. (2004). *Gilgamesh*. New York, NY: Free Press.
- Morrison, B., Farberov, S., & McCormack, D. (2013). “It's a big part of who I am and I don't like pants’: Agender boy whose skirt was set on fire in brutal attack leaves burn unit in time for Thanksgiving and won't let bullies win. *Daily Mail Online*. United Kingdom. Retrieved from www.dailymail.co.uk/news/article-2515384/Agender-teenager-skirt-set-home-Thanksgiving.html
- Morrison, B., Farberov, S., & McCormick, D. (2013, November 29). “It's a big part of who I am and I don't like pants’: Agender boy whose skirt was set on fire in brutal attack leaves burns unit in time for Thanksgiving and won't let bullies win. *Mail Online*. Oakland, CA.
- Mueller, A., S., James, W., Abrutyn, S., & Levin, M., L. (2015). Suicide ideation and bullying among us adolescents: Examining the intersections of sexual orientation, gender, and race/ethnicity. *American Journal of Public Health*, 105(5), 980–985. <http://doi.org/10.2105/AJPH.2014.302391>

- Murphy, H. E. (2012). Improving the lives of students, gay and straight alike: Gay-straight alliances and the role of school psychologists. *Psychology in the Schools*, 49(9), 883–891. <http://doi.org/10.1002/pits.21643>
- Mustanski, B., & Liu, R. T. (2013). A longitudinal study of predictors of suicide attempts among lesbian, gay, bisexual, and transgender youth. *Archives of Sexual Behavior*, 42(3), 437–448. <http://doi.org/10.1007/s10508-012-0013-9>
- National Center for Education Statistics. (2013). Educational institutions. Retrieved March 5, 2015, from <http://nces.ed.gov/fastfacts/display.asp?id=84>
- Olweus, D. (1994). Bullying at school: Basic facts and effects of a school based intervention ... *Journal of Child Psychology & Psychiatry*, 35(7), 1171–1190. <http://doi.org/0021-9630/94>
- Olweus, D. (2003). A profile of bullying at school. *Educational Leadership*, 60(6), 12–17.
- Olweus, D. (2011). Bullying at school and later criminality: Findings from three Swedish community samples of males. *Criminal Behaviour & Mental Health*, 21(2), 151–156. <http://doi.org/10.1002/cbm.806>
- Oreopoulos, P. (2006). Estimating average and local average treatment effects of education when compulsory schooling laws really matter. *American Economic Review*, 96(1), 152–175.
- Oreopoulos, P. (2007). Do dropouts drop out too soon? Wealth, health, and happiness from compulsory schooling. *Journal of Public Economics*, 91, 2213–2229. <http://doi.org/10.1016/j.jpubeco.2007.02.002>

- Pardini, P. (2013). Having allies makes a difference. *Phi Delta Kappan*, 94(5), 14–20.
- Patterson, M. (2012a). Gender Identity Scale. *Sex Roles*, 67(7-8), 422–434.
<http://doi.org/10.1007/s11199-012-0184-9>
- Patterson, M. (2012b). Self-perceived gender typicality, gender-typed attributes, and gender stereotype endorsement in elementary-school-aged children. *Sex Roles*, 67(7/8), 422–434. <http://doi.org/10.1007/s11199-012-0184-9>
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment*, 5(2), 164–172. <http://doi.org/10.1037/1040-3590.5.2.164>
- Peebles, B. F. (2015). Blurred lines: Sexual orientation and gender nonconformity in Title VII. *Emory Law Journal*, 64(3), 911–954.
- Peeters, M., Cillessen, A. H. N., & Scholte, R. H. J. (2010). Clueless or powerful? Identifying subtypes of bullies in adolescence. *Journal of Youth and Adolescence*, 39(9), 1041–1052.
- Peskin, M. F., Tortolero, S. R., & Markham, C. M. (2006). Bullying and victimization among Black and Hispanic adolescents. *Adolescence*, 41(163), 467–484.
- Poteat, V. P., Mereish, E. H., & Birkett, M. (2015). The negative effects of prejudice on interpersonal relationships within adolescent peer groups. *Developmental Psychology*, 51(4), 544–553. <http://doi.org/10.1037/a0038914>
- Poteat, V. P., Sinclair, K. O., DiGiovanni, C. D., Koenig, B. W., & Russell, S. T. (2013a). Gay-Straight Alliances Are Associated with Student Health: A Multischool Comparison of LGBTQ and Heterosexual Youth. *Journal of Research on*

- Adolescence (Wiley-Blackwell)*, 23(2), 319–330. <http://doi.org/10.1111/j.1532-7795.2012.00832.x>
- Puhl, R. M., & Luedicke, J. (2012). Weight-based victimization among adolescents in the school setting: Emotional reactions and coping behaviors. *Journal of Youth and Adolescence*, 41(1), 27–40. <http://doi.org/10.1007/s10964-011-9713-z>
- Quittner, J. (2003, December 23). Fast times at Harvey Milk High. *Advocate*, (905), 28.
- Reyna, C., Wetherell, G., Yantis, C., & Brandt, M. J. (2014). Attributions for sexual orientation vs. stereotypes: how beliefs about value violations account for attribution effects on anti-gay discrimination. *Journal of Applied Social Psychology*, 44(4), 289–302. <http://doi.org/10.1111/jasp.12226>
- Rickman, W. (2015). 2.5 million teens. *Knowledge Quest*, 43(5), 22–27.
- Rieger, G., & Savin-Williams, R. (2012). Gender nonconformity, sexual orientation, and psychological well-being. *Archives of Sexual Behavior*, 41(3), 611–621. <http://doi.org/10.1007/s10508-011-9738-0>
- Rieger, S., Göllner, R., Trautwein, U., & Roberts, B. W. (2015). Low self-esteem prospectively predicts depression in the transition to young adulthood: A replication of Orth, Robins, and Roberts (2008). *Journal of Personality and Social Psychology*. <http://doi.org/10.1037/pspp0000037>
- Rivard, N. (2003). High school for gay students: Safe haven or segregation? *District Administration*, 39(10), 16.
- Rivers, I., & Noret, N. (2008). Well-being among same-sex- and opposite-sex-attracted youth at school. *School Psychology Review*, 37(2), 174–187.

- Roland, E., & Idsoe, T. (2001). Aggression and bullying. *Aggressive Behavior*, 27, 446–462.
- Rosenberg, M. (1979). *Conceiving the self*. New York, NY: Basic Books.
- Ross, M. W., & Rosser, B. R. S. (1996). Measurement and correlates of internalized homophobia: A factor analytic study. *Journal of Clinical Psychology*, 52(1), 15–21. [http://doi.org/10.1002/\(SICI\)1097-4679\(199601\)52:1<15::AID-JCLP2>3.0.CO;2-V](http://doi.org/10.1002/(SICI)1097-4679(199601)52:1<15::AID-JCLP2>3.0.CO;2-V)
- Russell, S., Ryan, C., Toomey, R., Diaz, R., & Sanchez, J. (2011). Lesbian, gay, bisexual, and transgender adolescent school victimization: Implications for young adult health and adjustment. *Journal of School Health*, 81(5), 223–230. <http://doi.org/10.1111/j.1746-1561.2011.00583.x>
- Russell, S. T., Everett, B. G., Rosario, M., & Birkett, M. (2014). Indicators of victimization and sexual orientation among adolescents: Analyses from youth risk behavior surveys. *American Journal of Public Health*, 104(2), 255–261. <http://doi.org/10.2105/AJPH.2013.301493>
- Russell, S. T., Toomey, R. B., Ryan, C., & Diaz, R. M. (2014). Being out at school: The implications for school victimization and young adult adjustment. *American Journal of Orthopsychiatry*, 84(6), 635–643. <http://doi.org/10.1037/ort0000037>
- Schacter, H. L., & Juvonen, J. (2015). The effects of school-level victimization on self-blame: Evidence for contextualized social cognitions. *Developmental Psychology*, 51(6), 841–847. <http://doi.org/10.1037/dev0000016>

- Schmitt, D., & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features on global self-esteem. *Journal of Personality and Social Psychology*, 89(4), 623–642. <http://doi.org/10.1037/0022-3514.89.4.623>
- Shaw, T., Dooley, J., Cross, D., Zubrick, S., & Waters, S. (2013). The Forms of Bullying Scale (FBS): Validity and reliability estimates for a measure of bullying victimization and perpetration in adolescence. *Psychological Assessment*, 25(4), 1045–1057. <http://doi.org/10.1037/a0032955>
- Shibusawa, N. (2012). The lavender scare and empire: Rethinking Cold War antigay politics. *Diplomatic History*, 36(4), 723–752. <http://doi.org/10.1111/j.1467-7709.2012.01052.x>
- Sijtsema, J. J., Veenstra, R., Lindenberg, S., & Salmivalli, C. (2009b). Empirical test of bullies' status goals: assessing direct goals, aggression, and prestige. *Aggressive Behavior*, 35(1), 57–67. <http://doi.org/10.1002/ab.20282>
- Simoni, J. M., & Walters, K. L. (2001). Heterosexual identity and heterosexism: Recognizing privilege to reduce prejudice. *Journal of Homosexuality*, 41(1), 157.
- Skidmore, W. C., Linsenmeier, J. A., & Bailey, J. M. (2006). Gender nonconformity and psychological distress in lesbians and gay men. *Archives of Sexual Behavior*, 35(6), 685–97. <http://doi.org/10.1007/s10508-006-9108-5>
- Smokowski, P. R., & Kopasz, K. H. (2005). Bullying in school: An overview of types, effects, family characteristics, and intervention strategies. *Children & Schools*, 27(2), 101–110.

- Sohaili, T. (2011). Securing safe schools: using Title IX liability to address peer harassment of transgender students. *Law & Sexuality: A Review of Lesbian, Gay, Bisexual & Transgender Legal Issues*, 20, 79–95.
- Southampton City Council. (2015). Klein sexual orientation grid quiz. Retrieved from <http://sid.southampton.gov.uk/kb5/southampton/directory/advice.page?id=RsuF5ehfWvQ&familychannel=10-4>
- Spielberger, C. (1983). *State-Trait Anxiety Inventory for adults*. Mind Garden, Inc.
- Spielberger, C. D., Gorsuch, R. L., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Stapinski, L. A., Bowes, L., Wolke, D., Pearson, R. M., Mahedy, L., Button, K. S., ... Araya, R. (2014). Peer victimization during adolescence and risk for anxiety disorders in adulthood: A prospective cohort study. *Depression and Anxiety*, 31(7), 574–582. <http://doi.org/10.1002/da.22270>
- St. John, A., Travers, R., Munro, L., Liboro, R., Schneider, M., & Greig, C. L. (2014). The success of gay–straight alliances in Waterloo Region, Ontario: A confluence of political and social factors. *Journal of LGBT Youth*, 11(2), 150–170. <http://doi.org/10.1080/19361653.2014.878564>
- Tezvaran, Z., Akan, H., & Zahmacioglu, O. (2012). Risk of depression and anxiety in high school students and factors affecting it. *HealthMed*, 6(10), 3333–3339.
- Toomey, R. B., Ryan, C., Diaz, R. M., Card, N. A., & Russell, S. T. (2013). Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Psychology of Sexual*

Orientation and Gender Diversity, 1(S), 71–80. <http://doi.org/10.1037/2329-0382.1.S.71>

- Toomey, R. B., Ryan, C., Diaz, R. M., & Russell, S. T. (2011). High school gay–straight alliances (GSAs) and young adult well-being: An examination of GSA presence, participation, and perceived effectiveness. *Applied Developmental Science*, 15(4), 175–185. <http://doi.org/10.1080/10888691.2011.607378>
- Trotta, L. (2003). New York public school set to open for homosexual teens. *Washington Times, The (DC)*. Retrieved from <http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bwh&AN=4KB20030729081306&scope=site>
- Turkel, A. R. (2007). Sugar and spice and puppy dogs' tails: the psychodynamics of bullying. *The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 35(2), 243–258.
- Turner, I., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2014). Well-being, school climate, and the social identity process: A latent growth model study of bullying perpetration and peer victimization. *School Psychology Quarterly*, 29(3), 320–335. <http://doi.org/10.1037/spq0000074>
- U.S. Supreme Court. (2015, June 26). OBERGEFELL ET AL. v. HODGES, DIRECTOR, OHIO DEPARTMENT OF HEALTH, ET AL. U.S. Supreme Court. Retrieved from http://www.supremecourt.gov/opinions/14pdf/14-556_3204.pdf

- Van Dam, N., & Earleywine, M. (2011). Validation of the Center for Epidemiologic Studies Depression Scale--Revised (CESD-R): Pragmatic depression assessment in the general population. *Psychiatry Research, 186*, 128–132.
- van de Looij-Jansen, P., Goldschmeding, J. E. J., & Jan de Wilde, E. (2006). Comparison of anonymous versus confidential survey procedures: Effects on health indicators in Dutch adolescents. *Journal of Youth & Adolescence, 35*(4), 652–658.
<http://doi.org/10.1007/s10964-005-9027-0>
- VanderBos, G. (Ed.). (2007). *APA dictionary of psychology*. Washington, DC: American Psychological Association.
- Vaughan, M., & Waehler, C. (2010). Coming out growth: Conceptualizing and measuring stress-related growth associated with coming out to others as a sexual minority. *Journal of Adult Development, 17*(2), 94–109.
<http://doi.org/10.1007/s10804-009-9084-9>
- Vicario, B. A., Liddle, B. J., & Luzzo, D. A. (2005). The role of values in understanding attitudes toward lesbians and gay men. *Journal of Homosexuality, 49*(1), 145–159. http://doi.org/10.1300/J082v49n01_07
- Vivolo, A., Holt, M., & Massetti, G. (2011). Individual and contextual factors for bullying and peer victimization: Implications for prevention. *Journal of School Violence, 10*(2), 201–212. <http://doi.org/10.1080/15388220.2010.539169>
- Walls, N. E., Wisneski, H., & Kane, S. (2013a). School climate, individual support, or both? Gay-straight alliances and the mental health of sexual minority youth. *School Social Work Journal, 37*(2), 88–111.

- Watson, L. B., Varjas, K., Meyers, J., & Graybill, E. C. (2010). Gay-straight alliance advisors: Negotiating multiple ecological systems when advocating for LGBTQ youth. *Journal of LGBT Youth*, 7(2), 100–128.
<http://doi.org/10.1080/19361651003799700>
- Webley, K. (2011). A Separate Peace? *Time*, 178(16), 42–46.
- Weinrich, J. D., & Klein, F. (2002). Bi-gay, bi-straight, and bi-bi: Three bisexual subgroups identified using cluster analysis of the Klein sexual orientation grid. *Journal of Bisexuality*, 2(4), 109.
- Wong, C. F., Schrager, S. M., Holloway, I. W., Meyer, I. H., & Kipke, M. D. (2014). Minority stress experiences and psychological well-being: The impact of support from and connection to social networks within the Los Angeles House and Ball communities. *Prevention Science: The Official Journal of the Society for Prevention Research*, 15(1), 44–55. <http://doi.org/10.1007/s11121-012-0348-4>
- Zelig, R. (1945). Social factors annoying to children. *Journal of Applied Psychology*, 29(1), 75–82. <http://doi.org/10.1037/h0058002>

Appendix A: Demographic Form

High School Attended:

LGBT High School

High School with a Gay-Straight Alliance

High School without a Gay-Straight Alliance

Birth Sex: Please indicate whether you were born male, female, or other.

Male

Female

Other

Gender Identity: Please indicate with which gender you most closely identified with in high school.

Male

Female

MTF

FTM

Gender Queer/Other

Gender Expression: Please indicate which of the following gender expressions best characterized you in high school.

Gender Conforming (behavior is typical of birth sex)

Gender Non-Conforming (behavior is typical of someone of the opposite birth sex)

Neither (behavior is neither predominately gender-conforming nor gender-nonconforming)

Sexual Orientation: Indicate which of the following descriptions best matches your sexual orientation in high school:

Exclusively Heterosexual

Predominately Heterosexual

More Heterosexual than Homosexual

Equally Heterosexual and Homosexual (Bisexual)

More Homosexual than Heterosexual

Predominately Homosexual

Exclusively Homosexual

Race: Please indicate the race with which you most closely identify.

White

Black/African American

American Indian/Alaska Native

Asian

Native Hawaiian/Other Pacific Islander

Two or more races

Hispanic Identification: I identify as Hispanic

Yes

No

Appendix B: Self-Evaluation Questionnaire STAI Form Y-1

(sample items)

SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1**Directions:**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right* now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best. 1 = Not at all; 2 = Somewhat; 3 = Moderately so; 4 = Very much so.

- | | | | | |
|--------------------|---|---|---|---|
| 1. I feel calm. | 1 | 2 | 3 | 4 |
| 2. I feel secure. | 1 | 2 | 3 | 4 |
| 3. I am tense. | 1 | 2 | 3 | 4 |
| 4. I am regretful. | 1 | 2 | 3 | 4 |
| 5. I feel at ease. | 1 | 2 | 3 | 4 |

Appendix C: The Center for Epidemiological Studies Depression Scale Revised (CESD-R)

For each statement, please indicate how often you have felt this way recently by selecting the option you most agree with.

1. My appetite was poor.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

2. I could not shake off the blues.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

3. I had trouble keeping my mind on what I was doing.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week

___ Nearly every day for two weeks

4. I felt depressed.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

5. My sleep was restless.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

6. I felt sad.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

7. I could not get going.

___ Not at all or less than a day

___ One or two days last week

- ___ Three to four days last week
- ___ Five to seven days last week
- ___ Nearly every day for two weeks

8. Nothing made me happy.

- ___ Not at all or less than a day
- ___ One or two days last week
- ___ Three to four days last week
- ___ Five to seven days last week
- ___ Nearly every day for two weeks

9. I felt like a bad person.

- ___ Not at all or less than a day
- ___ One or two days last week
- ___ Three to four days last week
- ___ Five to seven days last week
- ___ Nearly every day for two weeks

10. I lost interest in my usual activities.

- ___ Not at all or less than a day
- ___ One or two days last week
- ___ Three to four days last week
- ___ Five to seven days last week
- ___ Nearly every day for two weeks

11. I slept much more than usual.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

12. I felt like I was moving too slowly.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

13. I felt fidgety.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

14. I wished I were dead.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

15. I wanted to hurt myself.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

16. I was tired all the time.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

17. I did not like myself.

___ Not at all or less than a day

___ One or two days last week

___ Three to four days last week

___ Five to seven days last week

___ Nearly every day for two weeks

18. I lost a lot of weight without trying to.

___ Not at all or less than a day

- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

19. I had a lot of trouble getting to sleep.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

20. I could not focus on the important things.

- ☐ Not at all or less than a day
- ☐ One or two days last week
- ☐ Three to four days last week
- ☐ Five to seven days last week
- ☐ Nearly every day for two weeks

Appendix D: Revised Internalized Homophobia Scale IHP-R

Directions: For each statement, indicate whether you disagree strongly (1), disagree (2), neither disagree nor agree (3), agree (4), or agree strongly (5)

Items

(a) I wish I weren't lesbian/bisexual [gay/bisexual].

1 2 3 4 5

(b) I have tried to stop being attracted to women [men] in general.

1 2 3 4 5

(c) If someone offered me the chance to be completely heterosexual, I would accept the chance.

1 2 3 4 5

(d) I feel that being lesbian/bisexual [gay/bisexual] is a personal shortcoming for me.

1 2 3 4 5

(e) I would like to get professional help in order to change my sexual orientation from lesbian/bisexual [gay/bisexual] to straight.

1 2 3 4 5

To score, add the responses to each question. Higher totals indicate greater degrees of internalized homophobia.

Appendix E: Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

- | | | | | | |
|-----|--|----|---|---|----|
| 1. | On the whole, I am satisfied with myself | SA | A | D | SD |
| 2.* | At times, I think I am no good at all. | SA | A | D | SD |
| 3. | I feel that I have a number of good qualities. | SA | A | D | SD |
| 4. | I am able to do things as well as most other people. | SA | A | D | SD |
| 5.* | I feel I do not have much to be proud of. | SA | A | D | SD |
| 6.* | I certainly feel useless at times. | SA | A | D | SD |
| 7. | I feel that I'm a person of worth, at least on an equal plane with others. | SA | A | D | SD |
| 8.* | I wish I could have more respect for myself. | SA | A | D | SD |
| 9.* | All in all, I am inclined to feel that I am a failure. | SA | A | D | SD |
| 10. | I take a positive attitude toward myself | SA | A | D | SD |

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the individual's self-esteem.

Appendix F: Satisfaction With Life Scale (SWLS)

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number of the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4- Neither agree nor disagree
- 3- Slightly disagree
- 2- Disagree
- 1- Strongly disagree

_____ In most ways my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

- 31-35 Extremely satisfied
- 26-30 Satisfied
- 21-25 Slightly satisfied
- 20 Neutral
- 15-19 Slightly dissatisfied
- 10-14 Dissatisfied
- 5-9 Extremely dissatisfied

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